# WASTE MINIMISATION & MANAGEMENT





# FOREWORD

In an effort to help achieve the Government's reduction target for waste disposal, Council has prepared the Waste Minimisation and Management Guide.

The Guide has been prepared to accompany the Waste Minimisation and Management Development Control Plan (DCP) and the corresponding control elements contained in other Council DCPs. The DCP and corresponding elements of control apply to the demolition, design, construction, use and ongoing management of development on all land to which the Hornsby Shire Local Environmental Plan 1994 applies. The primary purpose of the DCP and corresponding control elements is to provide development controls to promote responsible waste minimisation and management techniques in the pursuit of Ecologically Sustainable Development. The DCP and corresponding control elements provide general advice for all applicants on matters such as source separation, demolition, construction, design and siting of waste storage and recycling facilities as well as minimum submission requirements for an application.

The Guide provides the procedures for the submission and assessment of the waste minimisation and management aspects of an application.

The Guide provides specific design advice and best practice for the demolition, design and construction of buildings, waste facility design and on-going waste management.

It also contains detailed appendices providing advice on calculating generation rates, waste facility design, council services and lists of contacts.

It is envisaged that the protocol, best practice and detailed design standards will be regularly updated to be consistent with current and acceptable practice.

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# INTRODUCTION

Hornsby Shire Council is located in the north of the Sydney Metropolitan area. The Shire is home to approximately 150,000 people and contains a variety of urban, commercial, industrial and rural land uses.

In 1990, Hornsby Shire Council residents were estimated to have produced 149,000 tonnes of waste that required disposal. This represented 1,120 kilograms of waste for each and every person in the Shire.

The challenge for Hornsby Shire is to maximise resource recovery, minimise construction, household, commercial, industrial and rural waste and to promote ecologically sustainable building design and construction techniques in an effort to help achieve the Government's waste reduction target.

#### Ecologically Sustainable Development

The Waste Avoidance and Resource Recovery Act, 2002 requires the preparation of waste management strategies in the pursuit of minimising waste disposal and meeting the principles of ecologically sustainable development.

Household, commercial, construction and some industrial waste are often a valuable resource. These wastes can be reused or recycled both on or off site. Equally, the materials used in construction of buildings can help reduce waste. Second hand, recycled building products or building products with a good building environmental sustainability index can help reduce the waste.

The design of buildings, waste management in gardens and waste minimisation and management facilities can also help reduce the amount of waste generated for landfill.

Responsible on-going management of business and households can reduce waste and also lead to an economic benefit to those who employ the principles of the waste management hierarchy (i.e. Avoid, reduce, reuse, recycle and (as a last resort) dispose).

The Guide embodies practices which seek to educate proponents of development, households and business owners to ensure waste minimisation techniques are employed before, during and after the construction of buildings. These practices include information on:

- Waste Management Plan to enable ease in the preparation and assessment of the waste management plan and other waste management aspects of an application.
- Demolition of Buildings to maximise resource recovery in the demolition of buildings.
- Design of Buildings to promote ecologically sustainable building products and designs.
- Construction of Buildings to promote best practice project management and work practices to minimise construction waste.
- Waste Facility Design to ensure waste management and minimisation facilities are of appropriate size, type, location and design to enable the efficient, safe and healthy storage and removal of waste.
- On-going Waste Management to minimise garden and household waste, enable efficient collection of refuse and ensure there is responsible on-going waste management in business.
- Appendices includes details which corresponds with the Waste Minimisation and Management DCP, individual DCP elements and Guide to ensure effective waste management.

#### How to Use the Guide

The Guide accompanies the Waste Minimisation and Management DCP and corresponding control elements contained in other DCPs. Reference is made in the DCP and control elements to general design advice promoted by Council.

The Guide extends upon the general design advice and provides protocol, best practice and detailed design standards for the size, location, design and construction of waste minimisation and management facilities.

Protocol to enable ease in the preparation and assessment of the waste management plan.

- WP1.0 WASTE MANAGEMENT PLAN
- WP1.01 Example of a Waste Management Plan

# EXAMPLE OF A WASTE MANAGEMENT PLAN

### Description

An example of a completed plan that provides details of the waste minimisation and management techniques to be used for the demolition, design, construction, use and on-going waste management of buildings.

### Purpose

The purpose of the Waste Management Plan is to provide Council with details of:

- The volume and type of waste to be generated;
- Whether the waste will be re-used, recycled or disposed of
- Building materials and design techniques used; and
- How ongoing waste management will operate.

#### Protocol

To facilitate waste management and reduction, Council requires on-site sorting and storage of waste products pending re-use, recycling or collection.

The applicable sections of the following waste management plan must (at a minimum) be completed and submitted with applications which involve the demolition, construction, the use of a building and on-going waste management.

The following example of the waste management plan identifies the necessary detail which should be incorporated in a waste management plan. Larger developments should include the level of detail which accords with the scale of the development. The Resource NSW website contains a number of best practice publications that may be of assistance for more detailed waste management planning activities.

The information provided in the waste management plan will enable an assessment of how it is intended to re-use, recycle and dispose of waste. The information will be assessed against prescribed targets for the minimisation of waste disposal.

Outline of Proposal						
Site Address: 1 Jones Street, F	INYTOWN					
Site Address: 7 Jones Street, A Applicant's name and address: J. Smith &	Associates					
P.O. Box 3, Anytown, 2999						
Phone: 3333 0000	Fax: 3333 0001					
Buildings and other structures currently on the site: $$ B	rick dwelling-house, concrete					
slab and driveway, timber f	encing					
slab and driveway, timber fencing Brief Description of Proposal: Demolish existing building. Excavate site.						
Construct ten brick veneer townhouses.						
The details provided on this form are the intentions for managing waste relating to this project						
Signature of Applicant: J. Smith	Date: 14/4/03					

# SECTION ONE – DEMOLITION STAGE

To be completed for applications involving demolition, excavation or residential subdivision (where involving more than 6 lots).

MATERIALS ON SITE			DEST	NATION AND QU REUSE AND F		OF WASTE	DISPOS	AL	
TYPE OF MATERIAL	ESTIMATED VOLUME (M <sup>3</sup> ) *see A2.01 to help determine volume	ESTIMATED WEIGHT (kg) *see A2.01 to help determine weight	* see /	ON-SITE * see A1.02 for suggestions		OFF-SITE * see A1.02 for suggestions * see A1.04 for outlets		* see A1.03 for transfer stations and landfills	
			Quantity (kg)	Use	Quantity (kg)	Probable destination	Quantity (kg)	Probable destination	
Excavation Material									
Green Waste									
Bricks	39.6	39,600	9,900	Cleaned and rendered over for re-use	29,700	Remainder to — Crushing # RecyclingCompany	1		
Concrete	5.5	13,200	3,300	Re-use for use as fill	9,900	Remainder to Crushing & RecyclingCompany			
Tiles	16	12,000	3,000	Re-use for use as fill	9,000	Remainder to Crushing FRECycling Company			

(Section One – Demolition Stage – continued)

MATERIALS ON SITE	DESTINATION AND QUANTITY OF WASTE REUSE AND RECYCLING DISPOSAL						SPOSAL	
TYPE OF MATERIAL	ESTIMATED VOLUME (M <sup>3</sup> ) *see A2.01 to help determine volume	ESTIMATED WEIGHT (kg) *see A2.01 to help determine weight	ON-SITE * see A1.02 for suggestions		OFF-SITE * see A1.02 for suggestions * see A1.04 for outlets		* see A1.03 for transfer stations and landfills	
			Quantity (kg)	Use	Quantity (kg)	Probable destination	Quantity (kg)	Probable destination
Timber - Please Specify Oregon Pine	84	42,000	10,500	Re-use for floorboards and formwork	21,500	To Second Hand Building Materials Company	10,000	Remainder to Landfill
Plasterboard	11.4	5,700			5,700	To Landscape Supply Company		
Metals Please Specify	0.8	1,500			1,500	To Metal Recyclers		
Other – Please Specify								
TOTAL WASTE	114,000	kg (100%)	26,70	• kg( <u>23.5</u> %)	77,30	okg(_68_%)	10,000	kg ( 8.5 %)

Does the combined re-use and recycling of waste materials meet Council's target of 60% or greater (Yes/No)  $\underline{Yes(91.5\%)}$ . If no, revisit the table to see where improvements may be achieved. If the target is still not possible, please state reasons why:

# SECTION TWO – DESIGN STAGE

To be completed for all applications involving the design of buildings.

#### **Choice of Building Materials**

	Building Materials	Reused or Recycled	Ecological Sustainability of Building Materials (See A3.01)
Used		Used	Considered
	External Wall Type:	(*)	(*)
()	Brick		./
	Timber/Weatherboard	(*)	(1)
1	Autoclaved Aerated Concrete		
is a	Concrete		
	Stone		(¥)
6	Fibrous Cement		
()	Hardiplank		
i i	Steel	$\sum_{i=1}^{r}$	
(j	Aluminium	~ ~ ~	
· ()	Other (Specify)	$(\cdot)$	
	Frame:	()	
()	Timber	()	1.6
()	Steel	} {	
()			
	Other (Specify) Internal Wall Type:		
()	Brick	()	()
()	Timber	$\geq$	
()	Autoclaved Aerated Concrete		
()	Concrete		
()	Stone	$\langle \langle \rangle$	
(1)	Plasterboard	in the second se	
5	Insulation (Specify) Fibreglass	$(\mathbf{V})$	
()	Other (Specify)	$\dot{\mathbf{G}}$	
1	Insulation (Specify). Fibreglass Other (Specify). Ground Floor Type:		
()	Concrete Slab on Ground	()	1
()	Suspended Concrete Slab	(j	
()	Suspended Timber	()	
()	Insulation (Specify)	()	
()	Other (Specify) Floor Covering:	()	()
.1	Floor Covering:	and the second second	
(V)	Tiles	()	M
12	Slate	()	(),
(•)	Carpet	()	(M
	Timber	()	()
()	Vinyl	()	()
()	Other (Specify)	()	()
()	Roof Covering:		4
11	Concrete Roof Tiles	()	
$\langle \mathbf{v} \rangle$	Terracotta Roof Tiles (Clay)	()	()
	Slate Matal dock	()	()
	Metal deck Aluminium	()	()
		()	()
1.1	Fibreglass/Plastics Insulation (Specify) Fibreglass	()	()
	Other (Specify)	()	
	Notable Site Works:		()
()	Asphalt Driveways/Paving		
in	Concrete Driveways/Paving	$\left( \right)$	1 12
()	Brick Fences/Walls	()	( <b>v</b> )
in	Timber Fences/Walls		
()	Concrete Fences/Walls		(*)
$\dot{()}$	Stone Fences/Walls		
()	Other (Specify)		
	k boxes to indicate what building material	()	⊥ ()

te: Tick boxes to indicate what building material is used, whether it is reused or recycled and whether its ecological sustainability qualities have been considered.

# (Section Two – Design Stage - continued)

#### **Building Design**

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Design Techniques	Used
The appropriate location of waste management facilities	N.
Design energy efficient housing to minimise energy consumption and use of fossil fuels (see Energy Efficient Housing Policy)	(v)
Design to standard material sizes, use modular construction, prefabricated material and basic designs to reduce the need for off-cuts	(1)
Specify the use of second hand, recycled or resource efficient building materials	()
"Design for deconstruction" techniques should be used so materials can be easily reused/recycled at the end of the life span of the building	()
Retrofit and repair existing buildings	()
Design to minimise excavation	1
Re-use off-cuts in building design	(1)
Design and specify for the smallest possible satisfactory solution	
Retain a copy of the building plans and specifications with the building to aid maintenance and resource recovery at the end of a buildings lifespan	(1)
Landscape design incorporates an area for composting	(V)
Other (Specify)	()

1

Note: Tick boxes where design techniques have been or will be utilised to minimise waste.

# SECTION THREE – CONSTRUCTION STAGE

To be completed for all applications involving construction of buildings.

MATERIALS ON SITE	DESTINATION AND QUANTITY OF WASTE REUSE AND RECYCLING DISPOSAL						AL	
EXPECTED WASTE MATERIALS	ESTIMATED ESTIMATED VOLUME (M <sup>3</sup> ) WEIGHT (kg) *see A4.01 to help determine volume determine weight		ON-SITE * see A1.02 for suggestions		OFF-SITE * see A1.02 for suggestions * see A1.04 for outlets		* see A1.03 for transfer stations and landfills	
			Quantity (kg)	Use	Quantity (kg)	Probable destination	Quantity (kg)	Probable destination
Excavation Material	200	100,000	60,000	Re-use topsoil for landscaping and fill			40,000	Remainder to Landfill
Green Waste								· ·
Bricks	13.9	13940			13,940	To Crushing \$ Recycling Company		
Concrete	0.6	1,410	560	Re-use as fill	୫୨୦	To Crushing & Recycling Company		
Tiles	4.7	6,250	1,880	Re-use as fill	4,370	To Crushing & Recycling Company		

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#### (Section Three – Construction Stage – continued)

MATERIALS ON SITE			DESTIN	ATION AND QU REUSE AND		OF WASTE	DISPOS	AL
EXPECTED WASTE MATERIALS	ESTIMATED VOLUME (M <sup>3</sup> ) *see A4.01 to help determine volume	ESTIMATED WEIGHT (kg) *see A4.01 to help determine weight				OFF-SITE A1.02 for suggestions se A1.04 for outlets	* see A1.03 for transfer station and landfills	
			Quantity (kg)	Use	Quantity (kg)	Probable destination	Quantity (kg)	Probable destination
Timber - Please Specify Oregon Pine	2.4	1,200			1,000	To stockpile at Second Hand Building Materials Company	200	Remainder to <u> </u>
Plasterboard								
Metals – Please Specify	0.1	290			200	To Metal Recyders	90	Remainder to Transfer Station
Other – Please Specify								
TOTAL WASTE	123,090	kg (100%)	62,440	kg (_ <b>50.5</b> _%)	20,360	b kg( <u>l€.5_%</u> )	40,290	kg ( <b>33</b> %)

Does the combined re-use and recycling waste meet Council's target of 60% or greater (Yes/No) Yes (67%). If no, revisit the table to see where improvements may be achieved. If the target is still not possible, please state reasons why:

#### Protocol WP1.01

# SECTION FOUR - USE AND ON-GOING MANAGEMENT

To be completed for all applications involving the construction of residential accommodation and commercial and industrial developments or for the change of use of same.

# Describe how you intend to ensure on-going management of waste on-site. Issues which may require to be addressed include maintenance, signage and responsibilities.

ISSUE		PROPOSED ARRANGEMENTS
Size and Location		
	Use of premises.	Townhouses
	Number of dwellings/units.	10 dwellings
	Estimated garbage generation (See A6.01)	NA
	Estimated recycling generation (See A6.01).	N/A
	Number of and capacity of waste storage bins and	
	volume handling and reduction equipment to be used for managing garbage.	10× 1401
	Number of and capacity of waste storage bins and volume handling and reduction equipment to be used for managing recyclables.	10 x 240L
	Number of and capacity of waste storage bins and volume handling and reduction equipment to be used for managing garden organics (if applicable).	10×240L
	Area/s allocated for waste storage and recycling area and volume handling and reduction equipment (highlight on plan drawings).	Waste storage facility at street frontage
On-site Access		
	Describe arrangements for on-site access by residents to waste facilities (highlight on plan drawings)	Waste storage facility within 60m of residents
	Describe arrangements for on-site access by collection contractors to waste facilities (highlight on plan drawings)	An easement entitling waste services access on property
Design and Construction		
	Describe the fire safety features and protection equipment provided.	Pesign and construction meets BCA requirements
	Describe how noise associated with residents using the bins, collection contractors emptying the bins and waste falling through and out of the bottom of a garbage chute has been minimised.	N/A
	Describe any features for preventing ingress of vermin into waste storage areas.	Waste bins with lids
	Describe measures taken to ensure waste storage areas are aesthetically consistent with the rest of the development.	Design features of facility some as building
	Describe the light source and method of ventilation within waste storage areas.	Open air facility
	Describe facilities for washing bins, waste storage areas and garbage chute systems.	Cold water supply.
	Describe the features incorporated in the design of the volume handling and reduction equipment to ensure its safe and efficient operation.	N/A
On-going Waste Management		
	Identify the time frame that it will take to introduce an environmental management system (i.e. waste minimisation and management strategy).	3 months
	Describe arrangements for the cleaning and maintenance of waste storage areas and volume handling and reduction equipment.	Person nominated by body corporate.
	Describe arrangements for ensuring appropriate signage and ensuring residents/tenants are aware of how to use the waste management system correctly.	Person nominated by body corporate
	Identify each stage of waste transfer between residents'/tenants' units and loading into the collection vehicle. Who is responsible for each transfer?	Residents
	Describe arrangements for the disposal of hazardous waste (if applicable)(See A6.02).	N/A

### References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not – A model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings

Best practice to promote maximum resource recovery in the demolition of a building.

#### D1.0 DEMOLITION STAGE

- D1.01 Method of Recovery
- D1.02 Site Layout
- D1.03 Guide for the Placement of a Waste Storage Container in a Public Place

# METHOD OF RECOVERY

# Description

The method of recovery is the way in which materials are recovered during the demolition of buildings and the excavation of the land.

### Purpose

The purpose of the best practice is to:

- Minimise waste by the re-use and recycling of excavated materials and building materials; and
- Ensure the method of recovery is planned around every phase of demolition and excavation works prior to the design and construction of the building.

# **Best Practice**

Material recovery should be incorporated in project planning:

- for re-use or recycling on-site or off-site;
- by the preparation of a waste management plan.

A waste management plan should estimate the volume and composition of materials in the building for demolition. Appendix A2.01 contains approximate percentages of the types of materials included in various types of buildings.

Excavated materials and building materials should be sorted and separated at every stage of demolition.

Material recovery should be coordinated with job timing. Recovery activities of re-usable / recyclable materials should be planned at the following stages:

- Stripping out fittings, fixtures, flooring, doors, window frames, wrought iron, stained glass;
- Roof removal tiles, steel and aluminium roofing; and
- Demolishing the main structure timber, bricks.

Your approach to material recovery should be tailored for different demolition types and the majority composition of materials, namely:

- Residential (New or Old) bricks and concrete/mortar, timber and roof tiles;
- Commercial and industrial bricks and concrete/mortar, metals, plastic and glass;
- Internal Office Refurbishment internal walls/ceilings, floor coverings, carpets, tiles, metals, plastic and glass; and
- Footpaths, driveways, kerb and guttering concrete.

During demolition and material recovery activities, one should beware of potentially hazardous materials. Hazardous construction materials should be disposed of in accordance with EPA guidelines. Where the disposal of asbestos is involved, asbestos should be disposed of in accordance with the procedures for the removal and disposal of asbestos from buildings (see A2.02).

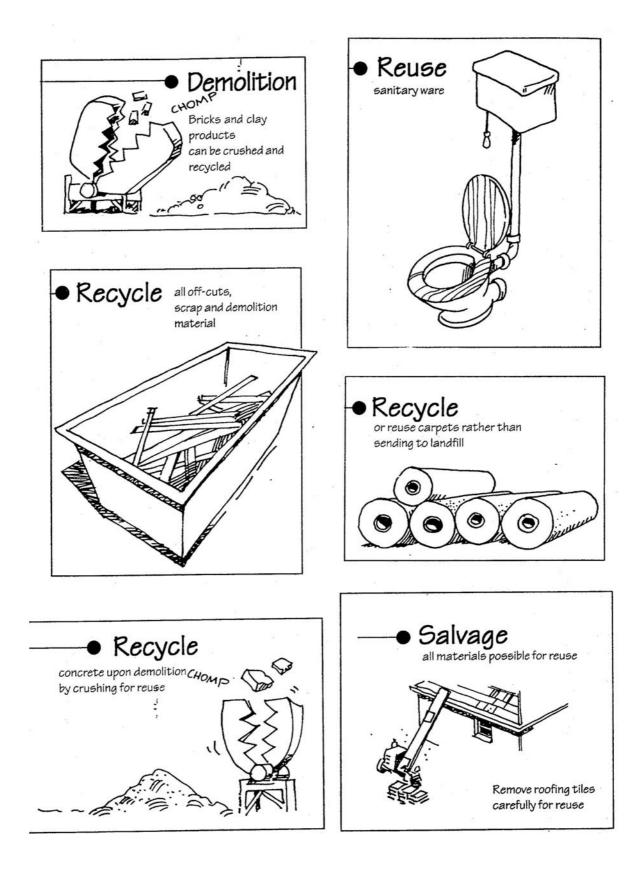
### References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not – A model Development Control Plan and Local Approvals Policy.

Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

New South Wales Waste Boards (1998) Waste Planning Guide for Development Applications, Inner Sydney Waste Board, Sydney.

Alan Reddrop, Chris Ryan and Andrew Walker – Morrison (January 1997), Housing Construction Waste: A Research study by the National Key Centre for Design at RMIT for the Housing and Construction Industries Branch of the Department of Industry, Science and Tourism – Occasional Series Paper No.14, Australian Government Publishing Service, Canberra.



(Source: TAFE NSW (1997)) Best Practice D1.01

# SITE LAYOUT

# Description

Site layout is the arrangement of materials, recovery equipment and location of access for transport equipment on the project site.

### Purpose

The purpose of the best practice is to:

- Ensure the volume and composition of materials in the building for demolition is estimated to provide for appropriate site layout;
- Determine the size and location of spaces to ensure efficient material recovery; and
- Ensure appropriate vehicular access to and on-site to enable the efficient removal of re-usable, recyclable and waste materials.

# Best Practice

Recovery activities should be considered when planning site layout. The volume and composition of recoverable materials and refuse should be quantified to ensure an on-site space of appropriate size and location is provided to enable efficient recovery practices.

The on-site space should provide for:

- material sorting;
- segregation materials that must be disposed of (i.e. Potentially hazardous ones);
- recovery equipment (eg. Concrete crushers and colour coded Mini-skips);
- material storage; and
- access for transport equipment.

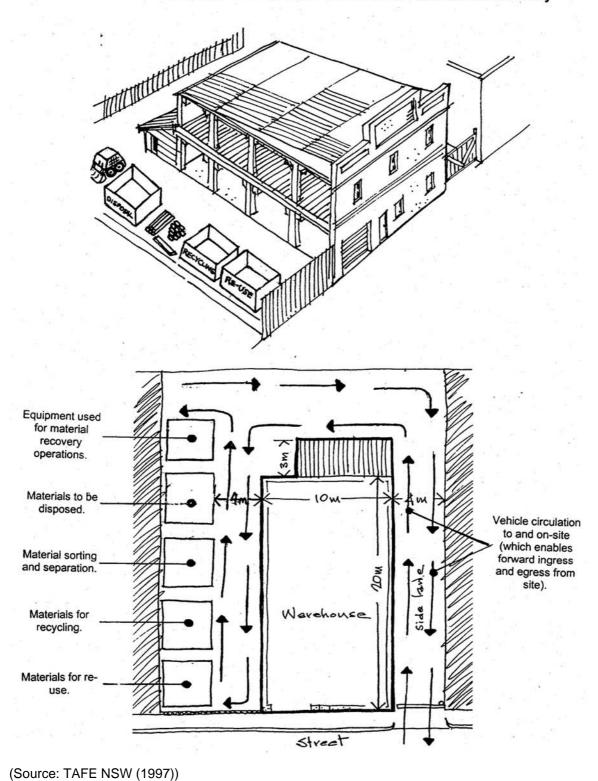
Appropriate vehicular access to and on-site to enable the efficient removal of reusable, recyclable and waste materials should be provided. Access should be readily available to the on-site space identified for the recovery of materials.

### References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not – A model Development Control Plan and Local Approvals Policy.

Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

New South Wales Waste Boards (1998) Waste Planning Guide for Development Applications, Inner Sydney Waste Board, Sydney.



Vehicular Access, Storage and Separation Areas to Assist Materials Recovery

Best Practice D1.02

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# PLACEMENT OF A WASTE STORAGE CONTAINER IN A PUBLIC PLACE

### Description

A waste storage container or mini skip is used for the disposal of bulky wastes usually associated with the demolition of a building.

### Purpose

The purpose of the best practice is to:

- Ensure the type and number of containers is appropriate to the materials to be stored and transported;
- Ensure the location of the container does not disturb traffic flow or pedestrian movement;
- Ensure the location of the container does not disturb normal stormwater flow;
- Ensure containers are clearly visible; and
- Ensure the size of the container/s is appropriate to the location.

# **Best Practice**

Under Section 68 of the Local Government Act, 1993, consent is required for the placement of a waste storage container in a public place (ie. a footway, nature strip, mall or road shoulder).

Approval under Section 68 of the Local Government Act, 1993 requires both owner's consent from Council where a waste storage container is placed on a local road and consent for the activity itself.

Council will only permit the storage of a waste storage container on a footway, nature strip, mall or road shoulder where waste containers cannot be located on private property.

#### Avoid, Reduce, Reuse, Recycle (and as a Last Resort) Dispose

Hornsby Shire Council is committed to the principles of the waste management hierarchy. This involves the minimisation of waste through reduction techniques and the re-use and recycling of materials before, as a last resort, materials are disposed of.

Many materials, particularly building materials can be reused or recycled. Council's Waste Minimisation and Management Guide contains a list of local businesses who buy and sell second hand building materials.

#### Waste Disposal Bins

Where the disposal of a substantial volume of material is required, a waste storage container may be the most cost and environmentally efficient disposal method available. These waste storage containers are ideal for building sites, home renovations, household and garden clean-ups.

#### Number and Type of Containers

A number of colour coded storage containers is often beneficial for the separation and storage of building materials on a demolition site. Where more than one waste storage container is to be provided, careful consideration should be given to the materials that will be stored and transported so

that materials can be separated. This will assist in maximising re-use and recycling and minimising disposal at landfill.

The size and type of the container should be appropriate to the nature of the waste generated and the location in which it is to be placed.

In general the following dimensions are of an acceptable range:

#### On Road Shoulders On Nature Strips/Malls

Length: 3 - 5.4m	Length: 2 - 5.4m
Width: 1.5 - 2.5m	Width: 1.5 - 2.5m
Height: 1.0 - 2.0m	Height: 1.0 - 2.0m

Larger waste containers are at the discretion of Council.

#### **Location of Containers**

A waste storage container should be located to maximise source separation, safety and to minimise environmental damage (ie. disturbance to stormwater drainage flow). The proposed location relative to the subject property, footpath and street alignment and intersections should be identified on the plans. No approval will be given by Council to a waste storage container placed in a public place where one or more of the following apply:

- Where there is sufficient, easily accessible space within the user's premises;
- Where skips front adjoining properties (without neighbours approval);
- In on road locations where parking, stopping, standing of motor vehicles are prohibited. These locations are often not signposted and include the following:
  - At an intersection or within 6 metres of the property line (whether controlled by traffic signals or not);
  - Within 9 metres of the approach side and 3 metres of the departure side of a pedestrian crossing;
  - Within 18 metres of the approach side and 9 metres of the departure side of a children's crossing or bus stop;
  - On a hill or curve where the view is not clear for at least 50 metres;
  - Within 3m from any separation lines; and
  - On a median strip or traffic island.
- For placement in on road locations where kerbside parking restrictions apply (eg no stopping, one hour parking);
- For placement on footpath locations at an intersection or within 6 metres of a corner, where there
  are large volumes of pedestrian traffic or where obstruction to vehicle access, sight lines or service
  facilities is likely; and
- Where skips are to be used to store putrescible inflammable or explosive material or other material specified by the NSW Waste Service. Contact should be made with the NSW Environment Protection Authority.

The following locations are not preferred:

- On classified arterial/sub-arterial roads;
- In narrow streets;
- Poorly lit areas;
- Where it would require pedestrians to use the roadway;
- Where stormwater drainage is impeded; and
- Locations which interfere with sight lines of drivers entering or leaving the premises.

#### Safety

The design of a waste storage container should be appropriate to the location in which it is to be placed to maximise safety in terms of visibility.

A waste storage container should:

- Be clearly visible;
- Be lightly coloured;
- Have rear marking plates complying with requirements for heavy vehicles/trailers under Clause 56A of Part iv(A) of the Motor Traffic Regulations;
- Have reflective tape; and
- Have flashing yellow lights, where appropriate.

NB. These measures are shown in Figure 1.

For further information telephone Council's Traffic Road and Safety Branch on (9847 6684) or consult Council's Policy "Control of Placement of Waste Storage Containers and Waste Trailers and/or Building Materials on Footways, Nature Strips and Local Road Shoulders" (See A2.03).

#### References

Hornsby Shire Council (1997) Policy No. ESEEC 5: Control of Placement of Waste Storage Containers and Waste Trailers and/or Building Materials on Footways, Nature Strips and Local Road Shoulders

Roads and Traffic Authority of NSW (1998) Interim Guidelines for the Placement of Building Waste Containers

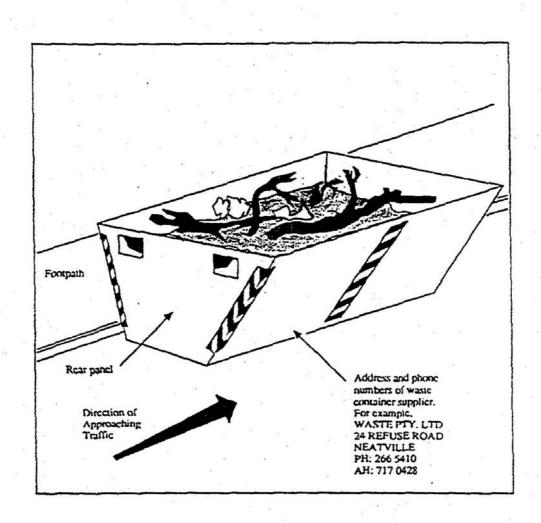


Figure 1 – Safety Features for Waste Storage Containers

Best Practice to promote the minimisation of construction waste and the use of ecologically sustainable building products and designs.

- B1.0 DESIGN STAGE
- B1.01 Choice of Building Materials
- B1.02 Building Design

# CHOICE OF BUILDING MATERIALS

# Description

The choice of building materials is the process which includes the consideration of new, second hand, recycled and ecologically sustainable building products for use in a building.

### Purpose

The purpose of the best practice is to:

- Maximise the use of second hand and recycled building materials in the construction of buildings; and
- Ensure the use of building materials with a good rating on the BES index in the construction of buildings.

### **Best Practice**

Second hand and recycled building materials should be considered for inclusion in construction. Appendix A1.02 provides suggestions for the reuse and recycling of building products. Appendix A1.04 provides a list of businesses who specialise in the sale of second hand and recycled building products.

All human processes have some impact on the environment, now or in the future. Building materials and construction processes contribute to these effects. The BES index (Building material Ecological Sustainability) considers these effects. It provides a life cycle analysis of building materials. The choice of building materials should be guided by the BES index or by undertaking a life cycle analysis. The education package prepared by TAFE NSW and titled "Minimising Construction and Demolition Waste" identifies that the following factors should be considered in undertaking a life cycle analysis:

- **Resource Depletion** of a material refers to the raw ingredients that are used in its manufacture. This includes aspects such as:
  - Damage of the environment from the mines and/or extraction sites used to win the necessary raw materials, the particular ecological sensitivity of these sites, the number of sites,/sources that are involved in winning the raw materials;
  - Amount of material extracted what amount of raw material has to be mined to produce a given amount of useable building material and how much is wasted;
  - Status of raw material is it commonly available or a scarce resource that is being depleted? Is it renewable?;
  - *Recycled content in the material* what proportion of the components used to make a building material are commonly recycled?;
  - Maintenance required the greater the need to maintain a material, the greater the chance that it might need renewal, will more maintenance result in more materials and energy expenditure being required?; and
  - *Recyclability of product* is it a 'once use' product or does it have further potential?
- **Inherent pollution of a material** refers to the consequences of extraction, manufacture and production:
  - Solid wastes?;
  - Liquid wastes?;
  - Greenhouse gases and air pollution emissions?; and

Best Practice B1.01

- Potentially hazardous products and particulates?
- **Inherent pollution of a product** refers to the consequences of fabrication, packaging during building use and at the end of its life:
  - Assembly of prefabricated components and packaging amount? Consequences?;
  - Fabrication of on-site waste and packaging amount?, consequences?;
  - Environmental impacts during building use construction, users?;
  - Environmental impacts at end of life deconstructable? Reuse/recycle?; and
  - Loss of amenity what is the existing use of the site?.
- **Embodied Energy** includes the energy costs consumed in winning the raw materials, the manufacture and transport of material, the equipment and labour used as well as the energy to place (build) the material or product on site:
  - *Energy* required to obtain raw materials, process them and produce a building material or product, including transport between these stages plus the process energy requirement in manufacture;
  - Transport energy highly variable dependent upon location and material?; and
  - Construction energy quantity?.

(Source: TAFE NSW (1997) – Part B pgs 38-39)

The Ecological Sustainability of Building Materials Table (see A3.01) contains a summary of the ecological sustainability of a number of building products. The Building Material Ecologically Sustainability Index: A numerical method for assessing the environmental impact of building materials produced by Partridge Partners Pty Ltd may also be a useful guide in choosing ecologically sustainable building materials.

#### References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not – A model Development Control Plan and Local Approvals Policy.

Northern Sydney Waste Board (1998) Making the Waste Not DCP work for you – a training package, Northern Sydney Waste Board, Sydney.

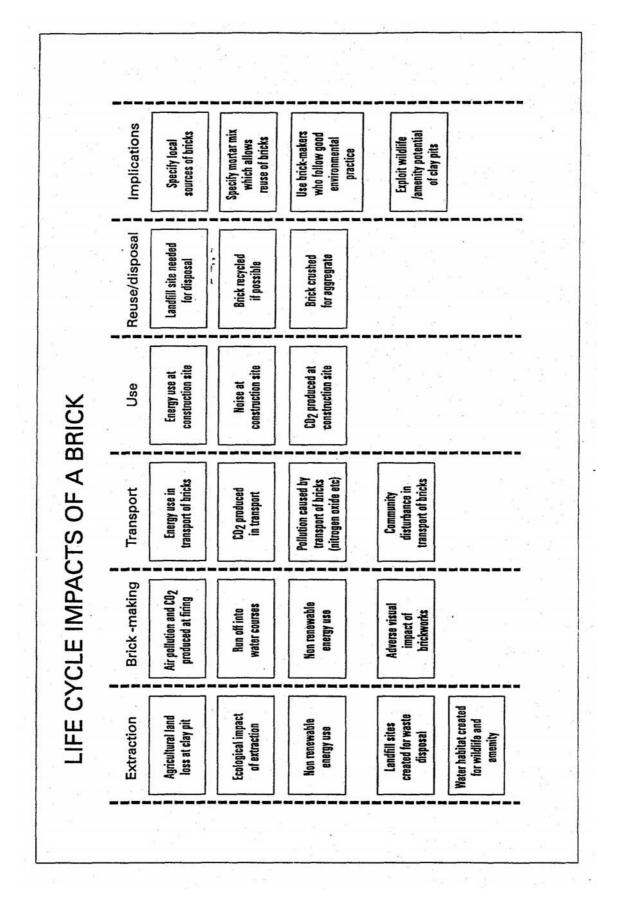
Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

Bill Lawson (1996), Building Materials Energy and the Environment: towards ecologically sustainable development. The Royal Australian Institute of Architects, Canberra. Local Government & Shire Association Nature Conservation Council of NSW (March 1996), Waste Management – Joint Policy Statement, Sydney.

Partridge Partners Pty Ltd. (December 1995), The Building Material Ecological Sustainability Index: A numerical method for assessing the environmental impact of building materials, Volume 1, Issue II, subscribers edition, Sydney.

New South Wales Waste Boards (April, 1999) Construction and Demolition Recycling Directory, Inner Sydney Waste Board, Sydney.

Inner Sydney Waste Board (1998) A Plan that Can Help Construction and Demolition Businesses to Save Money by Reducing Waste, Inner Sydney Waste Board, Sydney.



(Source: TAFE NSW (1997) - Part B pg 42)

Best Practice B1.01

# **BUILDING DESIGN**

# Description

Building design is the process which includes the siting of a building, the drafting of the floor plan and elevations of a building and the specification of building materials and fittings.

# Purpose

The purpose of the best practice is to promote the avoidance, reduction, re-use or recycling of waste by good building design.

# **Best Practice**

The education package prepared by TAFE NSW and titled "Minimising Construction and Demolition Waste" identifies that the following building design techniques can be used to avoid waste.

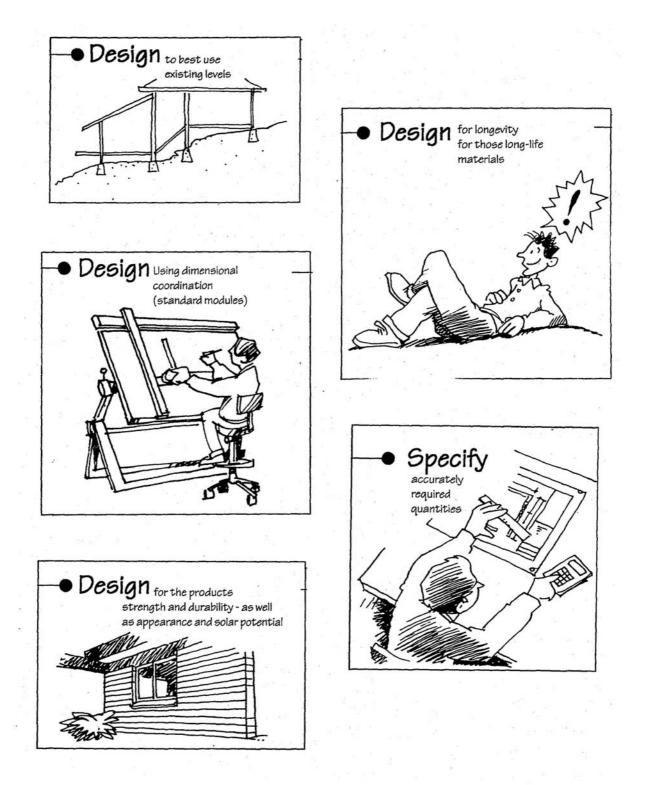
- Design to standard material sizes saves money and off-cuts.
- Detail your documentation save the often hasty on-site decisions.
- Incorporate modular and pre-fabricated construction save waste.
- Specify products with recycled content support recycling.
- Design for Deconstruction softer mortars where structurally acceptable, screws and bolts in preference to nails and glues, separable materials rather than irreversible.
- Retrofit existing buildings in preference to new construction.
- Ensure drawings and specifications are retained with the building to assist maintenance, renovation and eventual resource recovery on demolition.
- Consider potential product hazard to the worker and environment and likely disposal requirements when choosing products.
- Site plan to include all construction operations including waste issues.
- Design and specify the smallest possible satisfactory solution.
- Design and specify *resource-efficient* materials.
- Demand more flexible material sizes or design to fit / utilise the material sizes / specifications currently available.
- Use natural lighting, ventilation, heating / cooling to its maximum.
- Minimise or eliminate energy-intensive services and fitments.
- Push for acceptance of renewable / reused / recycled content materials.
- Design for disassembly (DFD).
- Specify materials with a recycled content to be used on the job.
- Be aware of which materials can be most readily reprocessed and recycled.

(Source: TAFE NSW (1997) - Part B pgs 45, 61, 69 and 71)

#### References

Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

New South Wales Waste Board (1998) Waste Planning Guide for Development Applications, Inner Sydney Waste Board, Sydney.



(Source: TAFE NSW (1997))

Best Practice B1.02

Best Practice to promote good project management and work practices which minimise construction waste.

C1.0 CONSTRUCTION STAGE

C1.01 Project Management

C1.02 Work Practices

# PROJECT MANAGEMENT

# Description

Project management is the overseeing of the project to ensure the efficient construction of a building and is typically the role of the site foreman, architect or builder.

# Purpose

The purpose of the best practice is to minimise waste by the use of good project management on-site.

# **Best Practice**

The research undertaken by Reddrop, Ryan and Walker has identified the following as best practice project management.

#### Material Storage

- Minimise the delay between delivery and installation and the chance for goods to go missing or be damaged.
- Consider the packaging of goods. Will it protect them, or are additional precautions necessary?
- Aim to have white goods delivered and installed as close as possible to handover date.
- The master-key system is a major contributor to the incidence of theft on building sites. Take care when selecting suppliers and subcontractors.
- Brief employees and make sure they understand the importance of security on site, at all stages of the job.
- Consider using prefabricated components, for example, framing and roof trusses, to reduce the time goods stay on site and their utility to other parties.

#### Material Handling

• Develop a site plan to deposit and stack materials prior to delivery. Consider material properties, where they will be required and how they will be moved. Stacking of bricks around the perimeter by the supplier is a wide-spread example of good practice.

#### **Checking of Goods**

- Check goods for quantities and quality on arrival. This should be done by the builder or a trusted employee. This allows the builder to act quickly if the supplier is at fault and allows continual evaluation of supplier's and manufacturer's quality, packaging techniques and accuracy.
- Enlist the ongoing participation of all trades in the checking process. This facilitates cost and quality control through regular feedback and plays an essential part in developing a workplace culture which supports efficiency and initiative.

#### Site Operations

#### The Role of Labour

- Encourage waste aware practices among trades and employees.
- There is an increasing trend to waste-producer accountability. Consider requiring trades to dispose of their waste or dispose on-site in a predetermined way.

#### Best Practice C1.01

- Use a written contract with all trades and consider inserting clauses requiring waste aware practices.
- Encourage trades to source outlets for waste where these exist. Not only will this reduce landfill charges, but in giving trades an income, it will provide a further incentive for waste management without requiring a premium.
- Instigate quality assurance strategies for waste management and establish yourself as a waste aware contractor. Use this as a marketing tool.
- When using labour-only trades, maximise their efficiency by careful supervision and the use of an accurate take-off that requires diligence to carry out successfully.
- Put an emphasis on forging long-term working relationships with skilful trades people who share similar commitments to quality and efficiency. Develop shared understanding of priorities and benefits to be gained from practices such as waste management. Work together to continually refine strategies and techniques.

#### Materials Re-use

- Where possible take goods to other sites. Carefully consider the cost of leaving remnant material for landfill and of carrying-on. Take into account transport time, storage and likelihood of future use.
- Plan to maximise resources. It may be economical to store bricks for use on rendered houses where colour and texture were irrelevant.
- Consider using storage space to accumulate goods to a useful quantity.

#### Treatment and Disposal of Waste On-Site

#### Generally

- Recyclers insist on clean waste, so store all wastes securely and separately to prevent contamination.
- Clearly designate waste storage bins by colour coding or labelling and protect them from the weather with a lid or cover.
- Provide financial incentives for subcontractors to put their wastes where you want them not where it falls. Consider making such requirements part of the subcontracting arrangement.
- Keep regular rubbish out of special material bins.
- Consider locking special waste bins at night and on weekends to stop others dumping their rubbish in your recycling bins.
- To contain general rubbish like plastic film, cardboard, glue and paint tins, create an on-site compound with star pickets and chicken wire. This will isolate the waste and stop it spreading around the neighbourhood.
- There exists various definitions of 'separation' builders must become aware of the various options and strategies waste management embraces.

#### Disposal of Waste On-Site

- Make supply-and-fix contractors responsible for the proper disposal of their wastes to a location agreed with the subcontractor and the recycling facility.
- Shop around for licensed and experienced waste carters.
- Ensure that wastes generated on-site are dumped legally. If they are not, you are the one held responsible and you may be heavily fined.
- Coordinate regular pick-ups to eliminate overflowing bins.
- On a multi-builder site, coordinate pick-ups with other builders to cut delivery costs.
- Talk to the manufacturers and suppliers about your and their waste management approach and how you can achieve maximum recycling benefits and marketing incentives.
- Find out about the location of the nearest separation/recycling station.

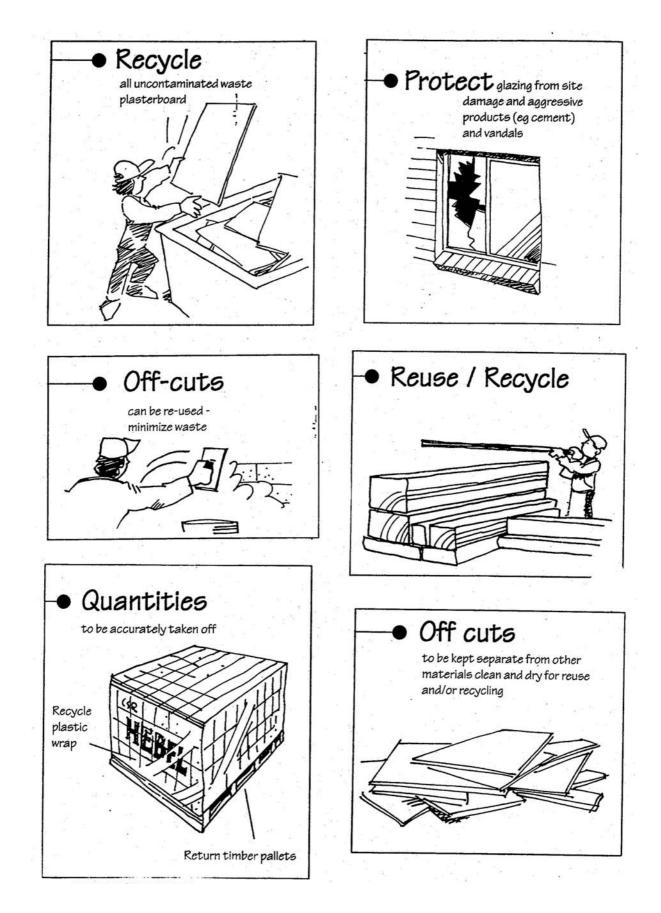
(Source: Reddrop, Ryan and Walker - Morrison (January 1997) – Pgs 67 and 68)

## References

Alan Reddrop, Chris Ryan and Andrew Walker - Morrison (January 1997), Housing Construction Waste: A Research study by the National Key Centre for Design at RMIT for the Housing and Construction Industries Branch of the Department of Industry, Science and Tourism – Occasional Series Paper No.14, Australian Government Publishing Service, Canberra.

Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

New South Wales Waste Board (1998) Waste Planning Guide for Development Applications, Inner Sydney Waste Board, Sydney.



(Source: TAFE NSW (1997))

# WORK PRACTICES

# Description

Good work practices are methods to ensure the efficient construction of a building and is typically the role of tradespersons and labourers.

## Purpose

The purpose of the best practice is to minimise waste by the use of good work practices on-site.

# **Best Practice**

The research study undertaken by Reddrop, Ryan and Walker has identified the following as good onsite work practices.

## **Good Work Practices**

## Concreting

- Use computer estimation to make order as tight as possible. Once on site, use best practice for waste control.
- Encourage deposition of remnant from any pump wash at front of site with other waste. Gather together plastic bags into one location for disposal.

## Framing Carpentry

- Spend time in accurate estimation. If an awkward member size is required, order the next size that will give a useable off-cut.
- Calculate these with an eye to noggin or other use.
- Use off-cuts for blocks where practical.
- Throw off-cuts into one or two locations for efficiency.
- Check supply of timber against order for quality and quantity.
- Ensure carpenter has complete cutting list and any other information that may be required to use timber to best effect.

## Electrical Services

• Consider using a sub-board to reduce wiring distances, quantities, waste and cost.

## Bricklaying

- Keep a stack of half a dozen halves at hand to save time and materials when working on lower courses.
- Throw waste into a couple of piles for easy removal and a clean, safe, site.
- Use halves instead of fulls on edge to make up footing levels.
- Use bricks carried over from other jobs in places where they won't be seen behind stairs, inner skirts and so on.
- Have bricks dropped around perimeter wherever possible to save damage in transporting to place of use.
- If uncertain of quantity, leave ordering the last couple of hundred until number required is better known.

## Best Practice C1.02

## Roof Tiling

- Throw tiles into a couple of piles around the perimeter, not all over the site.
- Require plastic ties to be collected in hand (instead of dropping to ground) and tied off in a bunch. It takes no time, is common practice for some contractors and makes a difference to the tidiness and environmental impact of the job.

## Plastering

- Use off-cuts from doors and windows in cupboards and other small areas.
- If supplying and fixing, consider taking on remnants a full sheet wide and over 800mm long. Some contractors find this worthwhile at present.

## Fix Carpentry

- Save anything over 400mm that can be scribed.
- Throw waste into white goods boxes if present. It makes disposal and separation easier, cleaner and quicker.

## Ducted Heating

• Tie off remnants in plastic bag and throw plaster cut-outs onto plaster pile.

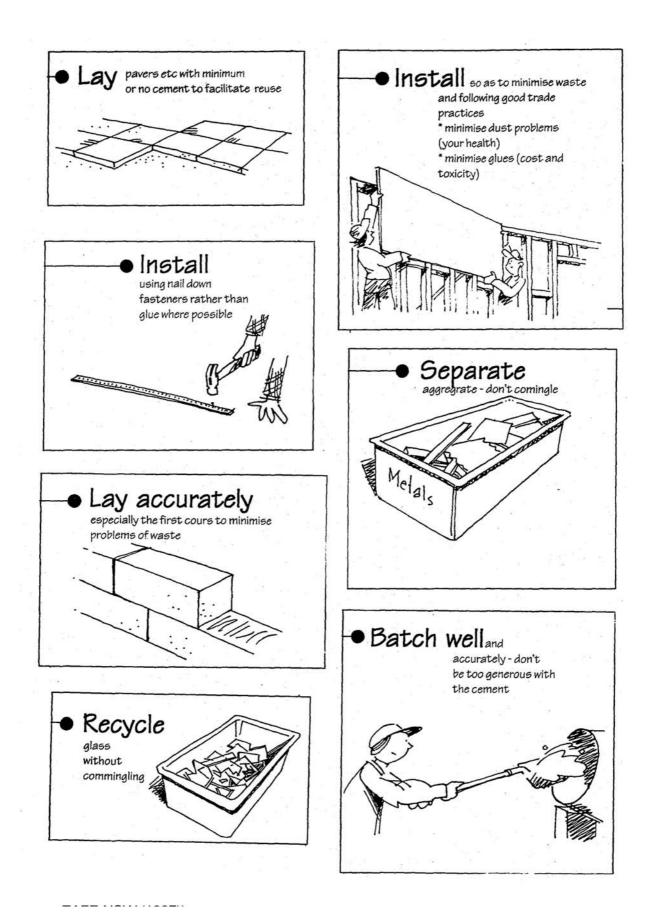
(Source: Reddrop, Ryan and Walker - Morrison (January 1997) – Pgs 68 and 69)

## References

Alan Reddrop, Chris Ryan and Andrew Walker - Morrison (January 1997), Housing Construction Waste: A Research study by the National Key Centre for Design at RMIT for the Housing and Construction Industries Branch of the Department of Industry, Science and Tourism – Occasional Series Paper No.14, Australian Government Publishing Service, Canberra.

Construction, Transport and Educational Services Consortium of the Western Sydney Institute of TAFE NSW (1997) Minimising Construction and Demolition Waste – A Learning Resource Package for Industry Training and Vocational Training – Waste Challenge Program – Joint Venture between the NSW Environmental Protection Authority (EPA) and the NSW TAFE Commission.

New South Wales Waste Board (1998) Waste Planning Guide for Development Applications, Inner Sydney Waste Board, Sydney.



(Source: TAFE NSW (1997))

Best Practice C1.02

Specifications to ensure waste minimisation and management facilities are of appropriate size, type, location and design to enable the efficient, safe and healthy storage and removal of waste.

- FD1.0 WASTE STORAGE AND RECYCLING
- FD1.01 Waste and Recycling Receptacles
- FD1.02 Waste Storage and Recycling Area / Facilities
- FD1.03 Garbage and Recycling Rooms
- FD1.04 Refrigerated Garbage Rooms
- FD2.0 WASTE TRANSPORTATION AND MINIMISATION
- FD2.01 Garbage Chute Systems
- FD2.02 Volume Handling and Reduction Equipment

# WASTE AND RECYCLING RECEPTACLES

# Description

Waste and recycling receptacles are bins, containers and crates which provide for the temporary storage of garbage and recyclable materials until its disposal by authorised garbage vehicles.

## Purpose

The purpose of these specifications are to:

- Ensure a development provides a sufficient number of receptacles for the reception and storage of garbage and recyclables arising on the premises;
- Ensure all receptacles, including cans, bags, containers, crates and bins for storage of garbage and recyclables, whether compacted or not, are of approved capacity, construction, shape and material;
- Require special types of receptacles to be provided for toxic, contaminated or dangerous materials; and
- Require commercial containers to be situated in an approved location by Council's Waste Management Team.

## **Specifications**

## Kitchens

Kitchens in dwelling-houses, multi-unit housing, residential accommodation and commercial and industrial developments should be designed to provide a waste cupboard which can accommodate waste collection receptacles to provide for the temporary (1 day) storage of garbage and recyclable and compostible material.

#### Dwelling-houses and Low and Medium Density Multi-Unit Housing in Urban Areas

Dwelling-houses and Low and Medium Density Multi-Unit Housing should be provided with a 140 litre mobile garbage bin (MGB) for domestic waste, a 240 litre MGB for recyclable materials and a 240 litre MGB for green waste for each dwelling.

#### Medium/High Density Multi-unit Housing

Medium/High Density Multi-Unit Housing should be provided with a 140 litre MGB for domestic waste and a 240 litre MGB for recyclable materials for every two dwellings.

## High Density Multi-unit Housing

High Density Multi-Unit Housing should be provided with 660 litre MGBs for domestic waste and 240 litre MGBs for recyclable materials based on the amount of garbage likely to be generated.

#### Dwelling-houses and Low Density Multi-unit Housing Developments in Rural Areas

Dwelling-houses and Low Density Multi-unit Housing developments in rural areas should be provided with a 140 litre MGB for domestic waste and a 240 litre MGB for recyclable materials for each dwelling.

## Dwelling-houses on Dangar Island

Dwelling-houses on Dangar Island should be provided with a 55 litre garbage bin for domestic waste and a 55 litre garbage bin for recyclable materials for each dwelling.

## Dwelling-houses in River Settlements

Dwelling-houses in river settlements should utilise the 660 litre MGBs for domestic waste and the 240 litre MGBs for recyclable materials kept in the lock up enclosure at Berowra Waters.

## General Design Requirements for Containers in Residential Buildings

Containers for residential buildings should:-

- be provided with a close fitting lid or lids which are light in weight and designed to be easily opened and closed;
- have a maximum capacity of 3.0m<sup>3</sup>;
- be fitted with four (4) swivel wheels of rubber or other approved durable material, which are capable of adequately supporting and easily manoeuvring the container under full load conditions; and
- be capable of being emptied by a Council approved rear loading garbage vehicle or other vehicle approved by Council.

## Commercial and Industrial Units

Commercial and industrial units should preferably be provided with a 140/240 litre MGB for commercial waste and a 240 litre MGB for recyclable materials for each unit. However, where developments generate considerable waste or have special needs, commercial and industrial units could be provided with a 660 litre MGB or a 1.5m<sup>3</sup> or 3m<sup>3</sup> garbage container for commercial waste and the same for recyclable materials based on the amount of garbage likely to be generated. Average commercial and industrial waste generation rates are contained in the Waste Generation Rate table (see A6.01).

Premises to be used by medical practices should provide receptacles for the safe storage and collection of medical waste.

Storage and disposal of hazardous waste should comply with EPA guidelines.

#### General Design Requirements for Containers in Commercial and Industrial Buildings

A containerised system of garbage collection or other approved mobile collection system (see A5.01) should be provided for the reception, storage and disposal of garbage in commercial and industrial buildings when:-

- the amount of garbage likely to be generated in the building exceeds or is likely to exceed, 0.20m<sup>3</sup>/day; or
- the building contains more than three businesses, shops or units; or
- Council considers that, due to the special circumstances of the business, a container or other system is required;

Containers for commercial buildings should be:-

- provided with a close fitting lid or lids which are light in weight and designed to be easily opened and closed;
- where fitted with wheels, such wheels should be of rubber or other approved material and be capable of adequately supporting and easily manoeuvring the container under full load conditions.

Where toxic, contaminated or dangerous materials are being stored or transported, special types of receptacles should be provided in accordance with Council's Contaminated Waste Storage and Transportation Code (see A6.02).

Where a container is not sited alongside the volume handling or compaction equipment, a mobile receptacle or trolley should be provided for the transportation of bags or compacted garbage from the volume handling or compaction equipment to the container.

## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings

# WASTE STORAGE AND RECYCLING AREAS/FACILITIES

# Description

A waste storage and recycling area is the area nominated for the storage of waste, recyclable materials and green waste until collected by Council or authorised contractors.

A purpose built waste and recycling material storage facility is a shelter which accommodates the waste and recycling containers of a development. The facility is required for medium density to medium/high density multi-unit housing developments and some commercial and industrial developments to:

- \* centralise the storage and collection of waste and recycling material;
- \* cater for the waste generation rates of the development;
- \* maintain an attractive streetscape; and
- \* minimise the opportunities for litter, odour, noise and dust pollution.

# Purpose

The purpose of these specifications are to:

- Ensure the facility provides adequate sorting and storage areas for the garbage and recyclables generated by the development;
- Ensure the facility is consistent with the building and streetscape;
- Ensure the facility and vehicular access is readily accessible and safe for users and collection service operators; and
- Ensure the facility is sited, designed and constructed to be free from or not to create a nuisance in terms of dust, litter, odour and noise.

# **Specifications**

The Waste Minimisation and Management DCP details when a waste and recycling material storage facility is required.

## Size

The size of the waste storage and recycling facility should be determined by calculating the waste generation rates and/or the number of and sizes of garbage and recycling containers (see A5.01 for waste generation rates of commercial uses and/or FD1.01 for residential and commercial waste and recycling receptacle specifications and A6.01 for approved waste storage container sizes). The size of the facility should also be adequate to house any equipment associated with the treatment, storage, recycling or disposal of garbage and provide a reasonable amount of extra space to easily load and manoeuvre the bins in accordance with Workcover Authority requirements.

## Location

## Residential Subdivision

Applications for residential subdivision (involving no new roads) comprising 6 or less lots should identify a suitable area for a waste collection point at the road frontage.

Applications for residential subdivision (involving no new roads) comprising more than 6 lots should identify a suitable area for a waste collection point at the accessway frontage.

## Dwelling-houses

Dwelling-houses should be designed to provide a hard stand area of 1m x 2m behind the building line and not within the private open space area to accommodate the MGBs for domestic waste, recyclable materials and green waste.

## Low Density Multi-Unit Housing

Applications for Low Density Multi-Unit Housing comprising 6 or less dwellings should identify a suitable area for a waste collection point at the road frontage.

Applications for Low Density Multi-Unit Housing comprising more than 6 dwellings should identify a suitable area for a waste collection point at the accessway frontage.

Low Density Multi-Unit Housing should be designed to provide a hard stand area of 1m x 2m behind the building line and not within the private open space area to accommodate the MGBs for domestic waste, recyclable materials and green waste.

## Medium Density Multi-Unit Housing

Medium Density Multi-Unit Housing developments which comprise of 6 or less dwellings should provide a hard stand area of 1m x 2m not within the private open space area of each dwelling to accommodate the MGBs for domestic waste, recyclable materials and green waste and identify a suitable area for a waste collection point at the road frontage.

Medium Density Multi-Unit Housing developments which comprise of more than 6 but not more than 16 dwellings should provide a communal waste storage and recycling facility in a level position (no greater than 1 in 8) within 6m of the front property boundary.

Where communal waste storage and recycling facilities are inappropriate within 6m of the front property boundary, an internal communal waste storage and recycling facility or garbage and recycling room should be provided. An internal communal waste storage and recycling facility or garbage and recycling room is appropriate where:

- The status of the roadway (heavy traffic) requires on-site access;
- An open air storage and recycling facility would detrimentally impact on streetscape or residential amenity;
- Site characteristics make access to the street difficult for individual unit holders (e.g. Distance > 75m and/or Gradient > 1:8); and
- Such arrangements suit collection services.

## Medium/High Density Multi-Unit Housing

Medium/High Density Multi-Unit Housing developments which comprise of 16 dwellings or less should provide a communal waste storage and recycling facility in a level position (no greater than 1 in 8) within 6m of the front property boundary.

Where communal waste storage and recycling facilities are inappropriate within 6m of the front property boundary, an internal communal waste storage and recycling facility or garbage and recycling room should be provided. An internal communal waste storage and recycling facility or garbage and recycling room is appropriate where:

- The status of the roadway (heavy traffic) requires on-site access;
- An open air storage and recycling facility would detrimentally impact on streetscape or residential amenity;
- Site characteristics make access to the street difficult for individual unit holders (e.g. Distance > 75m and/or Gradient > 1:8); and

- Such arrangements suit collection services.

## Commercial and Industrial Units

Commercial and industrial building/unit design should either provide a waste storage and recycling area/facility or a garbage and recycling room. Where needs are best met by an individual or communal waste storage and recycling area/facility, building/unit design should incorporate same in a level position (no greater than 1 in 8) to provide for efficient separation of waste and recyclables. Where a development involves multiple occupancy, communal facilities should be provided:

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

Waste storage and recycling facilities for commercial and industrial developments should be located to provide efficient access by collectors and collection vehicles. For large developments, a collection area should be located within the development.

## On-site Access

Adequate on-site access for collection vehicles should be provided to storage and recycling areas and/or facilities, namely:

- The driveway to be traversed by a collection vehicle should be of adequate strength, width and design to carry collection vehicles and loads;
- All developments provide a road design in accordance with the "Roads and Traffic Authority -Guidelines for Traffic Generating Development" for the manoeuvring of Council's authorised contractors' vehicles. (see A5.02 for vehicle criteria);
- Collection vehicles should be able to enter or leave premises in a forward direction. A roadway design with through ingress and egress is preferable. If unattainable, adequate turning should be provided in the form of a turning circle or hammerhead design;
- The internal roadway, where designed to be negotiated by the waste collection vehicle, should be generally 4 metres wide, and in particular, where manoeuvring to turn or negotiating a curve, should be minimum of 4.9 metres wide and have a maximum grade of 1 in 6. The internal roadway curves or turning area should have a minimum radius of 11.25 metres;
- An appropriate easement should be created over the proposed collection vehicle access route. (see A5.04); and
- On-site manoeuvrability should not be impaired for site users. Waste storage and recycling facilities/areas should be located so that their use does not interfere with the use of access driveways, loading bays or parking bays.

## Design and Construction

The design and construction of facilities should incorporate the fire safety and fire resistant provisions of the BCA.

The design, construction and installation of garbage and recycling facilities should prevent the harbourage of vermin. The ceiling of the facility should be finished with rigid, smooth faced, non absorbent material capable of being easily cleaned.

The opening to the facility should be of adequate size to allow easy access for receptacles or containers and permit the re-installation and maintenance of equipment that may be used in the facility. If only receptacles are to be used in the facilities, a minimum width of 820mm should be provided. If containers are to be used in facilities, a minimum width of 1,800mm should be provided. The facility should only be accessed by a ramp (i.e. no steps).

The floor of the facility should be constructed of concrete or other approved material, be at least 75mm thick and be graded and drained to an approved drainage outlet connected to the sewer. The floor of the facility should be finished to a smooth even surface and be coved at the intersection of the walls and plinths.

The walls of the facility should have a minimum height of 1m, be constructed of approved solid impervious material, cement rendered internally to a smooth even surface and be coved at all intersections.

## Racks and Other Equipment

Where storage and other drainage racks are provided, they should be constructed of galvanised metal or other approved material which is durable, impervious and non-corrosive. Racks should be installed at least 50mm clear of walls with the lowest racks installed at least 300mm above the floor. Racks should be designed to prevent receptacles/containers placed thereon from coming into contact with the walls.

All equipment designed to be in a fixed position in a garbage facility, should be installed in an approved manner, located clear of walls and be supported on:-

- plinths of at least 75mm high, constructed of solid impervious material, finished to a smooth even surface and be coved at the intersection with walls and floors, or
- legs at least 150mm high, constructed of galvanised metal or other approved material which is durable, impervious and non-corrosive.

## Water Supply

An adequate approved supply of cold water should be provided to the facilities. Hot water should be provided for commercial purposes.

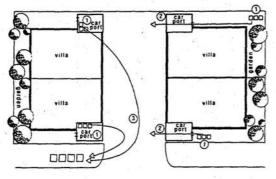
Hose cocks should be protected or located in such a position that they cannot be damaged. A hose which is of adequate length and is fitted with a nozzle should be connected to the hose cock for the cleaning of the facilities.

The facility should be appropriately signposted to minimise waste (see A5.03).

## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings

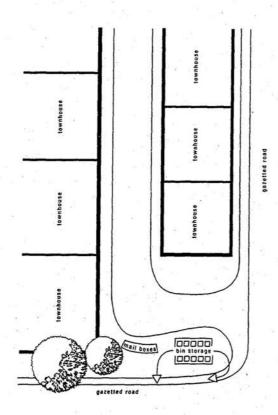


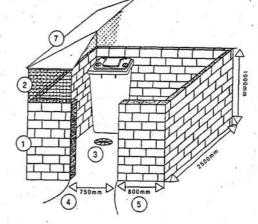
gazetted road

1) space allocated for bin storage in car port or yard

- (2) bins taken to kerb through car port
- 3 residents responsible for taking bins to kerb on collection day

Example of an appropriate waste storage and recycling area and waste collection point for a Medium Density Multi-Unit Housing development which comprises 6 or less dwellings.





(1) face brickwork to match main building

(2) lattice upper as visual screen

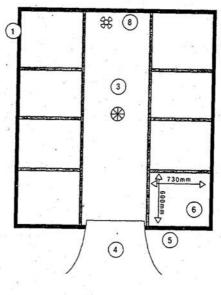
3 concrete floor graded and drained to Sydney Water connection

4 ramp or path - no ste

(5) front brickwork option - could have complete open front

6 space allocated for M

roof over bin bay
 anti-vandal tap with with hose fitting

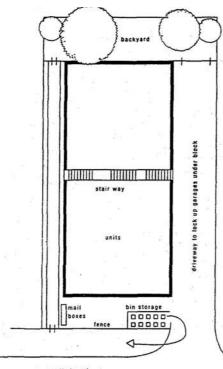


Design features of a waste storage and recycling facility.

Example of an appropriate waste storage and recycling facility for a Medium Density Multi-Unit Housing development which comprises more than 6 but not more than 16 dwellings.

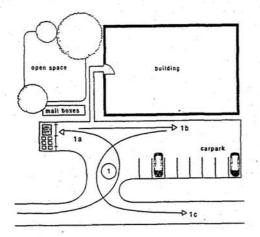
(Source: Resource NSW (2002))

## Specification FD1.02



gazetted road

Example of a waste storage and recycling facility for a Medium/High Density Multi-Unit Housing development which comprises 16 dwellings or less.



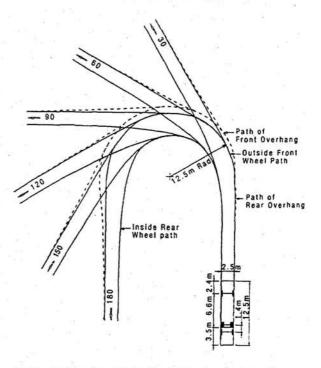


Example of an appropriate waste storage and recycling facility for a commercial and industrial building.

(Source: Resource NSW (2002))

Roads to be negotiated by waste collection vehicle are to be designed to cater for the minimum turning circle and clearance requirements of the relevant waste collection vehicle.

Sample turning circle design source: AUSTROADS design single unit truck / BUS (12.5m) scale 1 : 200 radius 12.5m ABSOLUTE MINIMUM RADIUS For use at mandatory stop only. Turning speed up to 5km/h.



Notes:- 1. Locate face of kerbs at least 0.6m clear of wheel paths.

2. Allow 0.6m clearance outside path of overhang and ensure that this area is kept free of road furniture.

## Specification FD1.02

# GARBAGE AND RECYCLING ROOMS

# Description

A garbage and recycling room is a room in the development where garbage and recycling receptacles are stored awaiting reuse or removal from the premises and may also include the collection point. All residents or tenants of the development deposit their waste and recycling material in the containers within the room for collection. The room is required for high density multi-unit housing developments, some medium and medium-high density multi-unit housing developments and some commercial and industrial developments to:

- \* centralise the storage and collection of waste and recycling material;
- \* cater for the waste generation rates of the development;
- \* maintain an attractive streetscape; and
- \* minimise the opportunities for litter, odour, noise and dust pollution.

# Purpose

The purpose of these specifications are to:

- Ensure the garbage and recycling room provides adequate sorting and storage areas for the garbage and recyclables generated by the development;
- Ensure the garbage and recycling room and vehicular access to it are readily accessible and safe for users and collection service operators;
- Ensure the garbage and recycling room is sited, designed and constructed to be free from, or not to create a nuisance in terms of dust, litter, odour and noise; and
- Ensure the garbage and recycling room is appropriately sited, designed and constructed to ensure the safety of the buildings occupants.

# Specifications

## Size

The size of the facility should be determined by calculating the waste generation rates and/or sizes of garbage and recycling containers (see A6.01 for waste generation rates of commercial uses and/or FD1.01 for residential and commercial waste and recycling receptacle specifications and A5.01 for approved waste storage container sizes). The size of the facility should also be adequate to house any equipment associated with the treatment, storage, recycling or disposal of garbage and provide a reasonable amount of extra space to easily load and manoeuvre the bins in accordance with Workcover Authority requirements.

## Location

## Medium and Medium/High Density Multi-Unit Housing

Medium and Medium/High Density Multi-Unit Housing developments comprising more than 16 dwellings should provide an internal communal waste storage and recycling facility or a communal garbage and recycling room.

A garbage and recycling room should be located within the main building and within 10m of the waste collection point. The area between the garbage and recycling room and waste collection point should be of appropriate width and grade (with no steps) to enable the efficient movement of waste materials.

### High Density Multi-Unit Housing

High Density Multi-Unit Housing developments should provide a communal garbage and recycling room.

The garbage and recycling room should be located within the main building and within 10m of the waste collection point. The area between the garbage and recycling room and waste collection point should be of appropriate width and grade (with no steps) to enable the efficient movement of waste materials.

#### Commercial and Industrial Units

Commercial and industrial building/unit design should either provide a waste storage and recycling area/facility or a garbage and recycling room. Where needs are best met by an individual or communal garbage and recycling room, building/unit design should incorporate same and a collection point to provide for efficient separation of waste and recyclables. Where a development involves multiple occupancy, communal facilities should be provided:

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

Garbage and recycling rooms and collection points for commercial and industrial developments should be located to provide efficient access by collectors and collection vehicles. For large developments, a collection area should be located within the development.

The garbage and recycling room should be located within the main building and within 10m of the waste collection point. The area between the garbage and recycling room and waste collection point should be of appropriate width and grade (with no steps) to enable the efficient movement of waste materials.

## **On-site Access**

Adequate on-site access for collection vehicles should be provided to storage and recycling areas, namely:

- The driveway to be traversed by a collection vehicle should be of adequate strength, width and design to carry collection vehicles and loads;
- All developments to provide road design in accordance with "Road and Traffic Authority -Guidelines for Traffic Generating Development" for the manoeuvring of Council's authorised contractors' vehicles. (see Appendix A5.02 for vehicle criteria);
- Collection vehicles should be able to enter or leave premises in a forward direction. A roadway design with through ingress and egress is preferable. If unattainable, turning should be provided in the form of a turning circle or hammerhead design.
- The internal roadway, where designed to be negotiated by the waste collection vehicle, should be generally 4 metres wide and in particular, where manoeuvring to turn or negotiating a curve, the road should be a minimum of 4.9 metres wide and a maximum grade of 1 in 6. The internal roadway curves or turning area should have a minimum radius of 11.25 metres.
- An appropriate easement should be created over the proposed collection vehicle access route. (See Appendix A5.04).
- On site manoeuvrability should not be impaired for site users. Garbage and recycling rooms should be located so that their use does not interfere with the use of access driveways, loading bays or parking bays.

#### Design / Construction

Specification FD1.03

The design of the garbage and recycling room should incorporate the fire safety and fire resistant provisions of the BCA.

All fire extinguisher apparatus should be reliable and effective. Fire protection equipment should be maintained in accordance with the relevant Australian Code for fire equipment servicing.

The garbage and recycling room should be constructed in such a manner so that the use and operation of the room does not at any time give rise to offensive noise to the users of the building or adjoining occupiers.

The garbage and recycling room should be constructed in such a manner so as to prevent the entry or harbourage of vermin.

The design of garbage and recycling rooms and the materials used should compliment the design and the materials used in the building. Landscaping should be provided where necessary to screen the facility.

Garbage and recycling rooms should have adequate weather protection for users of the facility.

The doorway opening to the garbage and recycling room should be of adequate size to allow easy access for receptacles or containers and permit the re-installation and maintenance of equipment that may be used in the room. If only receptacles are to be used in the garbage room, a minimum width of 820mm should be provided. If containers are to be used in garbage rooms, a minimum width of 1,800mm should be provided.

The floor of a garbage and recycling room should be constructed of concrete or other approved material, be at least 75mm thick and be graded and drained to an approved drainage outlet connected to the sewer. The floor of the room should be finished to a smooth even surface and be coved at the intersection with walls and plinths.

The ceiling height of a garbage and recycling room should be a minimum of 2.1m. The ceiling of the garbage room should be finished with rigid, smooth faced, non absorbent material capable of being easily cleaned.

The walls of the garbage and recycling room should be constructed of approved solid, impervious material, be cement rendered internally to a smooth even surface and be coved at all intersections.

A close fitting, robust, weather-proof door with a smooth and impervious internal face should be provided to all garbage and recycling rooms. Doors should also be capable of being easily opened.

Garbage and recycling rooms should be constructed in such a manner so as to prevent the entry of vermin.

Where containers are housed in a garbage room:-

- A bump rail, constructed of galvanised metal or other approved material which is durable and impervious should be installed around and be at least 50mm clear of walls. Alternatively, flat sheet iron should be installed flush with the walls.
- Galvanised angle iron should be installed around door openings.

## Lighting

Garbage and recycling rooms should be provided with artificial light, controlled from a switch located outside the room.

Where necessary, artificial light should be provided outside the garbage and recycling room.

## Ventilation

Specification FD1.03

Garbage and recycling rooms should be ventilated by:-

An approved system of mechanical exhaust ventilation in accordance with the requirements of the BCA, or

• A permanent unobstructed natural ventilation opening, direct to the external air, having an aggregate area of not less than one-twentieth (1/20th) of the floor area.

## Racks and Other Equipment

Where storage and drainage racks are provided, they should be constructed of galvanised metal or other approved material which is durable, impervious and non-corrosive. Racks should be installed at least 50mm clear of walls with the lowest racks installed at least 300mm above the floor. Racks should be designed to prevent receptacles/containers placed thereon from coming into contact with the walls.

All equipment designed to be in a fixed position in a garbage room should be installed in an approved manner, located clear of walls and should be supported on: -

- plinths of at least 75mm high, constructed of solid impervious material, finished to a smooth even surface and be coved at the intersection with walls and floors, or
- legs at least 150mm high, constructed of galvanised metal or other approved material which is durable, impervious and non-corrosive.

## Water Supply

An adequate approved supply of cold water should be provided to all garbage rooms. Hot water should be provided for commercial purposes.

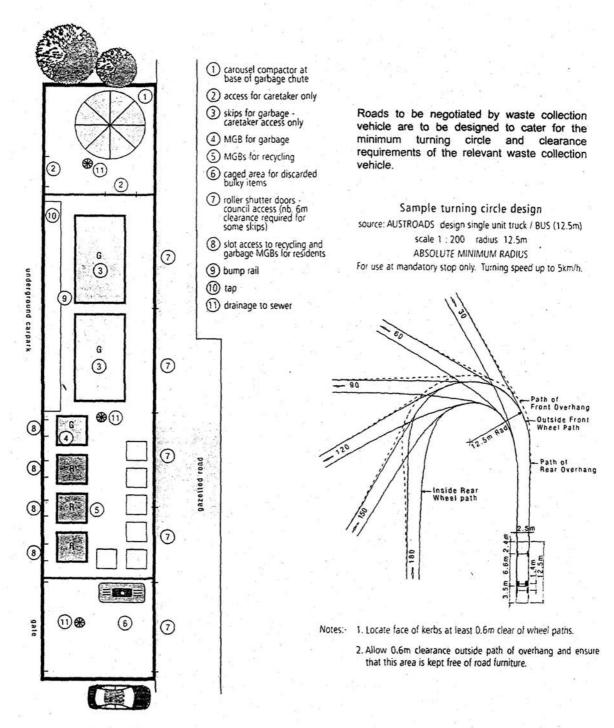
Hose cocks should be protected or located in such a position that they cannot be damaged. A hose which is of adequate length and is fitted with a nozzle should be connected to the hose cock for the cleaning of the receptacles and room.

The room should be appropriately sign posted to minimise waste (See Appendix A5.03).

## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings.



Example of a garbage and recycling room for a High Density Multi-Unit Housing development.

# REFRIGERATED GARBAGE ROOMS

## Description

A refrigerated garbage room is a garbage room which is refrigerated by a cooling system room and is dedicated to the specialised containment of food scraps and perishables. All businesses with specialised storage needs should deposit their waste in the containers within the room for collection.

## Purpose

The purpose of these specifications are to:

- Ensure a refrigerated garbage room provides special features to ensure it is safe for users and collectors.

# **Specifications**

A refrigerated garbage room should be provided for commercial and industrial developments where:

- There are large volumes of food scraps and perishables (such as seafood); and
- Infrequent collection is arranged.

In addition to the specifications for garbage rooms (see FD1.03), the following matters are required to be addressed.

## Design/Construction

A door which can at all times be opened from the inside without a key should be provided to all refrigerated garbage rooms. Doors should be capable of being easily opened and have a smooth and impervious internal face.

## Ventilation

Where a garbage room is refrigerated by a cooling system that maintains the room temperature at or below 10°c, the provision of mechanical or natural ventilation is not required.

## Safety Devices

Refrigerated garbage rooms should be provided with an approved storm device, located outside but controlled only from within the room (see also Code of Practice for Compactor's, developed by the Work Cover Authority of NSW).

## Racks and Other Equipment

Where possible, pipes should be concealed in the floor, walls or ceiling. Where this is not possible, pipes should be fixed on brackets so as to provide at least 25mm clearance between the pipe and any wall or ceiling surface and 100mm between the pipe and the floor or any plinth.

## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Specification FD1.04

# GARBAGE CHUTE SYSTEMS

## Description

A garbage chute system moves garbage and recyclables from individual units or dwellings by gravity to a centralised garbage and recycling room. The system comprises all the components to make a garbage chute operative and includes the garbage chute, loading hoppers, the canopy, service openings and service compartments.

# Purpose

The purpose of these specifications are to:

- Require a garbage chute system to be provided in residential, commercial or industrial buildings where deemed necessary;
- Ensure a garbage chute, associated hoppers and service openings is of appropriate size, design and materials for the volume of materials generated by the development and to ensure the unimpaired flow directly to facilities in the garbage room;
- Ensure a garbage chute system provides ventilation in accordance with the BCA, adequate weather protection and no airflow into service compartments;
- Ensure a garbage chute system is designed to provide a safe and healthy environment for the occupants of the building and users of the waste management facilities;
- Ensure a garbage chute system is designed to be easily cleaned and maintained; and
- Ensure a garbage chute system is designed to provide adequate space to enable source separation and storage of recyclables.

# **Specifications**

## **General Requirements**

A garbage chute system should be provided in buildings exceeding three (3) storeys of flats. In buildings other than residential buildings where approved means of transporting garbage is not provided, a garbage chute should be required. Care should be taken to ensure the equipment is capable of holding the garbage likely to be generated without overflowing. In multi-storey developments or buildings where a large amount of waste is operated, a second chute or chutes may be required.

Garbage chute systems should incorporate the fire safety and fire resistant provisions of the BCA. All fire extinguisher apparatus should be reliable and effective. Fire protection equipment should be maintained in accordance with the relevant Australian Code for fire equipment servicing.

An appropriate management system for handling systems should be provided in accordance with Workcover Authority requirements.

Garbage chute systems should be constructed so that the use and operation of the system does not at any time give rise to offensive noise to the users of the building or adjoining occupiers.

A garbage chute system should be constructed in such a manner as to prevent the entry or harbourage of vermin.

A garbage chute system should not be used for the transportation of manure, ashes, offal or other offensive material arising from a trade or industry. Such material should be disposed of in a manner approved by Council.

## Location and Construction of Garage Chutes

Chutes should be constructed of aluminium, stainless steel or other approved material which is smooth faced, resistant to distortion, durable, fire resistant, impervious and non-corrosive. Metal chutes should be not less than 1.6mm thick. In buildings of substantial height the thickness of the chute, particularly at its base, may need to be increased.

Chutes should be enclosed in an approved acoustic material.

#### Service Openings

Service openings should be constructed of aluminium, stainless steel or other approved material which is smooth faced, resistant to distortion, durable, fire resistant, impervious and non corrosive.

Service openings should be fitted with an approved loading hopper.

Service openings should be not less that 1000mm or more than 1500mm above floor level.

Service openings should have an area of not more than 60% of the cross sectional area of the chute or have a diagonal measurement that does not exceed the diameter of the chute.

Service openings should be provided with an appropriate sprinkler system in accordance with the BCA.

#### Construction and Location of Service Compartments

A service compartment should be provided adjoining every service opening.

An appropriate number of recycling bins should be provided in the service compartment.

Service compartments should be of adequate size to enable source separation and storage of recyclables in accordance with Workcover Authority requirements. An appropriate management system should be provided for handling recyclables.

Service compartments should have a minimum floor area of 1m<sup>2</sup> with minimum dimensions of not less than 800mm.

The floor of service compartments should be constructed of concrete or other approved solid impervious material, be at least 75mm thick, be finished to a smooth impervious surface and be coved at the intersection with walls.

The walls of service compartments should be constructed of approved solid impervious material, be cement rendered internally to a smooth even surface and be coved at all intersections.

The ceilings of service compartments should be finished with rigid, smooth faced non-absorbent material capable of being easily cleaned.

Service compartments should be constructed in such a manner as to prevent the entry of vermin.

A close fitting, self closing, one hour fire rated door which can at all times be opened from the inside, should be provided to all service compartments. An appropriate sprinkler system should be provided in accordance with the BCA.

Service compartments should be well ventilated and provided with artificial lighting controlled from outside the room.

Chutes should be cylindrical in section, have a minimum internal diameter of not less than 500 mm and rise without offsets or bends from the garbage room to the top floor ceiling line.

Chutes should be constructed so that any internal overlaps are in the direction of the garbage flow. All internal joints and seams should be finished to a smooth even surface and be waterproofed. The number of joints should be minimal.

Chutes should have branches to loading hoppers not exceeding 1,000mm in length and be angled so as to allow free flow of garbage into the chute.

Chutes should have branches to loading hoppers designed so as to prevent the ricochet of falling material or persons reaching into the chute.

Chutes should be provided with an approved cut-off door at or near the base of the chute to close off the chute to allow the movement of the container or compacting equipment while maintenance is being carried out. The required fire damper may be of sufficient gauge to also act as a cut-off damper.

Chutes should be supported at each floor by mountings which prevent the transfer of noise and vibrations to the building frame or slabs.

Chutes should be completely enclosed in a shaft constructed of brickwork or concrete, be sealed and fitted at the lowest floor slab level.

Chutes and hoppers should be contained in a service compartment or room so as to not open directly into a habitable area.

Chutes should terminate in the garbage room and discharge directly into a receptacle or garbage compactor in a position where it will not cause any nuisance.

Chutes should extend above roof level without a reduction in diameter and be fitted with an approved mesh. Approved means of weather protection may be fitted, however, this must not impede the upward flow of air.

Chutes should be easily accessible from each habitable floor and be provided with operation and maintenance instructions of the equipment displayed in a convenient position.

An appropriate sprinkler system should be provided at the top of the chute.

#### Cleaning and Maintenance

Approved facilities for cleaning and maintenance should be provided for all chutes, chute branches and hoppers and include:

- an inbuilt cleaning brush to enable periodic brushing of the chute's internal surface; and
- a water supply point located at the top of the chute for cleaning purposes with a control cock located in the garbage or compacting room.

#### Ventilation

Chutes should be ventilated to ensure that:

- air does not flow from the chute through any service opening;
- the flow of air in the chute does not impede the downward movement of garbage; and
- adequate ventilation is provided between the chute and the enclosing walls of the shaft.

#### Loading Hoppers

Loading hoppers should be constructed of aluminium, stainless steel or other approved material which is smooth-faced, resistant to distortion, durable, fire resistant, impervious and non-corrosive.

Specification FD2.01

Loading hoppers should be designed to close off the service opening in the chute when the device is opened during loading.

Loading hoppers should automatically return to the closed position after use.

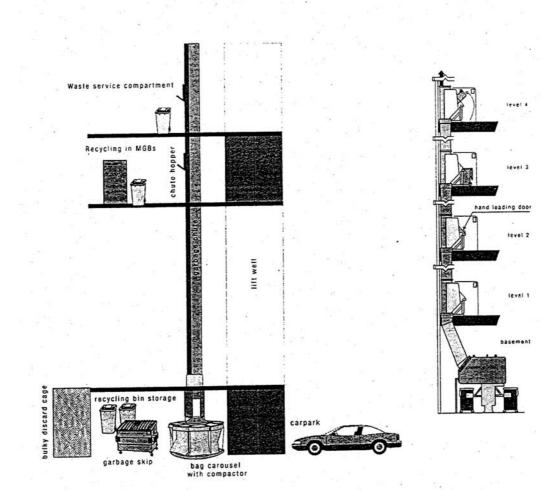
Loading hoppers should not extend into the chute, permit the free flow of garbage into the chute and permit easy cleaning of the device and chute branch.

Loading hoppers should be designed so as to prevent spillage of liquid or solid waste back into the service compartment.

## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings.



Example of a garbage chute system for a building containing more than 3 storeys.

(Source: Resource NSW (2002))

Specification FD2.02

# VOLUME HANDLING AND REDUCTION EQUIPMENT

# Description

Volume handling and reduction equipment is machinery that reduces the volume of material and includes shredding, pulverising and compressing devices.

# Purpose

The purpose of these specifications are to:

- Require volume handling and reduction equipment to be installed to maximise sorting and storage space and to minimise the disposal costs associated with transportation and landfill;
- Ensure volume handling and reduction equipment is of the appropriate type to ensure the safety and amenity of users of the building and occupants of adjoining premises; and
- Ensure adequate instructions for volume handling and reduction equipment is installed to enable the correct operation and maintenance of the equipment.

## **Specifications**

## **General Requirements**

In every residential building which is required to be provided with a chute system, an approved system of volume handling or reduction should be installed in the garbage room if the number of units and/or separate domiciles servicing the chute exceeds 20.

Care should be taken to ensure the equipment is capable of holding the garbage likely to be generated without overflowing. In multi-storey developments or buildings where a large amount of waste is operated, a second chute or chutes may be required.

Volume handling and reduction equipment such as shredders, compactor's, carousels, vary in size and capacity and consultation with manufacturers required before an area can be allocated.

An approved system of volume handling or reduction may be required to be installed in an approved position in buildings due to the nature or volume of garbage arising on the premises.

The design of volume handling and reduction equipment should incorporate the fire safety and fire resistant provisions of the Australian Building Code. All fire extinguisher apparatus should be reliable, effective and protection equipment should be maintained in accordance with the relevant Australian Code for fire equipment servicing.

Volume handling and reduction equipment should be of a type approved by the NSW Health Department.

Volume handling and reduction equipment should operate automatically.

All electric controls should be physical separated from the main chute and/or volume handling or reduction equipment to reduce restoration after fire damage.

Volume handling and reduction equipment should be installed clear of walls and be located so as to allow adequate space for maintenance and operation.

Adequate instructions advising of the correct operation and maintenance of the equipment should be displayed in a convenient position near the equipment. Equipment should not be used on different

recyclable materials. Removing contaminants from compacted recyclables is almost impossible and compacted loads containing any contaminants will be rejected by markets.

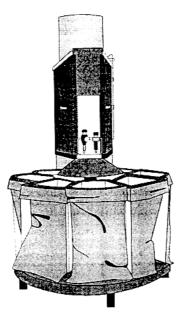
Individual waste disposal unit/s may be permitted to be installed in units. Waste disposal unit/s should be of a type approved by the NSW Health Department.

The volume handling and reduction equipment should be of appropriate type and installed in such a manner as to prevent the entry or harbourage of vermin.

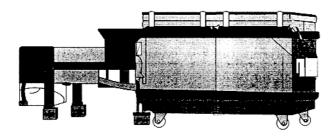
## References

The Combined Sydney Regional Organisation of Council's (February, 1996) Waste Not - A Model Development Control Plan and Local Approvals Policy.

Resource NSW (February, 2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings.



Rotational bag carousel with compactor



Static compactor with skip bin

Examples of appropriate volume handling and reduction equipment.

Source: Resource NSW (2002)

## **Specification FD2.02**

Specification FD2.02

**ON-GOING WASTE MANAGEMENT: Best Practice** 

Best Practice to promote the minimisation and management of garden, household, commercial and industrial wastes.

- O1.0 GARDEN WASTE
- O1.01 Re-use and Recycling of Garden Waste
- 02.0 RECYCLING HOUSEHOLD WASTE IN THE GARDEN
- O2.01 Mulching
- O2.02 Composting
- O2.03 Worm Farming
- O3.0 RESIDENTIAL WASTE MANAGEMENT
- O3.01 Household Recycling
- O3.02 Waste Collection Services
- 04.0 COMMERCIAL AND INDUSTRIAL WASTE MANAGEMENT
- O4.01 Waste Audits and Waste Minimisation Plans

# **RE-USE AND RECYCLING OF GARDEN WASTE**

# Description

The reuse and recycling of garden waste involves the reuse and recycling of waste from trees, shrubs and lawn.

## Purpose

The purpose of the best practice is to promote the reuse and recycling of grass clippings and prunings as mulch or compost.

## **Best Practice**

## **Recycling Lawn Clippings**

Lawn clippings should be recycled as compost or mulch. Being high in nitrogen and moisture and quick to decompose, recycling clippings on site will benefit your garden.

Mix grass clippings with coarse materials to keep them from clumping in the compost heap.

Add clippings to a compost heap in thin layers of up to 6cm. Grass is best composted while still fresh.

Grass clippings as mulch reduces water loss and provide nutrients to your garden. It is unwise to use clippings from a lawn that has weeds or when weed killer has been used.

Do not place too close to plant stems.

The following steps should be observed when recycling grass clippings:

- Mix with leaf litter, twigs or bark to avoid clumping;
- Let the mixture partly break down before using it as a mulch;
- Add nitrogen such as well-rotted manure or compost in a one-to-ten ratio to minimise temporary nitrogen loss from the soil;
- Mulch soil early spring before it has time to warm up;
- Water area before applying mulch;
- Apply the mulch around trees and shrubs to a depth of 75 to 100mm.

#### Reuse and Recycling of Tree and Shrub Waste

Pruning off and leaves that have been dropped by trees and shrubs should be chopped up finely and used as mulch, composted or placed in worm farms. The organic material should be used throughout the garden.

(Source: New South Waste Boards (1999))

## References

New South Wales Waste Boards (1999) Reduce, Reuse, Recycle – Garden and Household Waste.

Friends of the Earth (1998) Low Waste Garden Series.

Northern Sydney Waste Board (2000) Create Your Own Eden – The Marvel of Mulch.

#### Best Practice O1.01



# Go grasscycling!

The cheapest and easiest way to recycle your lawn clippings is to leave them on the lawn after mowing.

(Source: Northern Sydney Waste Board (2000))

(Source: Northern Sydney Waste Board (2000))

Best Practice O1.01

# MULCHING

## Description

Mulching is a method for the recycling of garden and household wastes in the garden to improve soil quality, growing conditions and to reduce the use of water and chemical fertilisers.

# Purpose

The purpose of the best practice is to promote the recycling of garden and household waste products for use as mulch.

## **Best Practice**

Mulch is the reuse of various materials, including garden and household wastes in the garden.

Mulch can be used to reduce the compaction of the soil to improve water retention and air movement.

Mulch can be used to provide a natural slow release nutrient source and to promote soil microbial activity.

Mulch can be used to help improve growing conditions by regulating soil temperature, reducing water loss through evaporation and suppressing weed growth.

## What can be Used as Mulch?

Mulch can include the following garden and household waste products:

•	Woodchips		-	Long lasting mulch (2 years). Can be toxic to plants if not aged or composted. Does not feed plants. Use over manure mulch.
•	Leaf Mulch		-	Blends well with native gardens. Needs to be renewed twice a year. Does not feed plants and can become matted and stop water penetration.
•	Forest Mulch		-	Wood waste with some leaves. Long lasting (1-2 years).
•	Grass Mulch		-	Wet or dry grass requires the addition of organic nitrogen to minimise temporary nitrogen loss in soils.
•	Newspapers		-	Innovative use of household waste. Requires the addition of organic nitrogen to minimise temporary nitrogen loss in soils.
•	Stones Gravel	and	-	Good for arid plants.

#### How to Make Mulch

Fresh materials such as grass or leaves can be composted or left to partially breakdown. Mix one part compost, worm castings or rotten manure to ten parts of mulch.

Small prunings and non-invasive plants can be directly used as mulch. Their pruning can be shredded with a lawn mower. For larger branches use a commercial mulcher.

## How to Apply Mulch

The procedures for **mulching garden beds** are:

Best Practice O2.01

- clear around plants by removing weeds and other debris;
- turn the soil over and break up hand packed surfaces;
- drench the soil surface around plants to encourage plants to develop deep roots;
- sprinkle a few handfuls of compost to encourage healthy plant growth; and
- apply mulch to a depth of 8 cm and avoid applying mulch too close to the stems and trunks of the plants.

Sheet mulching prepares an area for planting without the need to weed or dig. The procedures for sheet mulching are:

- cover the area with five sheet thick newspaper and leave for a week or two;
- to plant, remove cover, plant into compost and mulch heavily.

## **Reusing Lawn Clippings**

Lawn clippings should be reused by letting them fall as mulch. The following procedures can be followed to effect the reuse of lawn clippings.

- keep the mower blades sharp to ensure finer clippings that break down quicker;
- set the mower to a high setting so that only the top third of the grass is cut;
- mow lawn when it is dry to allow clippings to filter to the ground without clumping;
- leave the catcher off when mowing;
- mulching mowers are specially designed to recut into fire pieces that break down easier;
- recycle tall grass or wet clippings.

(Source: New South Waste Boards (1999))

## References

New South Wales Waste Boards (1999) Reduce, Reuse, Recycle – Garden and Household Waste.

Friends of the Earth (1998) Low Waste Garden Series.

Northern Sydney Waste Board (2000) Create Your Own Eden - The Marvel of Mulch.

# The many benefits of mulch



(Source: Northern Sydney Waste Board (2000))

Best Practice O2.01

# COMPOSTING

# Description

Composting is the biological decay process that converts organic wastes into crumbly earth-like substance. This improves the soil structure and produces vigorous disease free plants.

# Purpose

The purpose of the best practice is to promote the recycling of garden and household waste products for use as compost.

## **Best Practice**

Mulch can be used to increase the aeration of compacted soil, improve the drainage in heavy clay soil and increase the water holding capacity of sandy soils.

Compost can be used to reduce soil salinity and prevent the crusting of silty soils.

Compost can be used to insulate soil against temperature extremes and increase soil microbial activity.

## What can be Composted

Any plant or animal waste can be composted, including food scraps, newspapers, grass, prunings, manures and weeds. Animal products need to be composted in a well managed hot heap. Dog and cat manures are best buried in the garden as they can be a source or parasites.

## How to Make Compost

The procedures for making compost are:

- Choose a site:

   on soil with a slight slope for drainage preferably in a sunny site;
   Choose a composting system:
   an open heap;
  - an enclosure; or
    - a compost bin.
- Collect organic materials including:
- coarse plant materials, pruning, old plants, weeds, leaves;
  - household food scraps;
  - mown grass catchings;
  - chook manure;
  - rich soil.
  - Coarse material scraps and grass in layers between 2-8 cm thick. The manure and soil layers need only be 1-2 cm thick. The steps to layering are as follows:
    - begin with a layer of coarse material and add water;
    - Add a layer of scraps and water;
    - Add a layer of grass and water;
    - Add a layer of soil and water;

Best Practice O2.02

Layer:

- repeat the process until the bin is full or a full heap has been created;

• Turn:

- the compost heap or contents in the compost bin 2 weeks after its making and then once per week until finished.
- the compost heap should be mixed with a fork / shovel making sure the compost does not dry out or get too wet;
- the non smelling compost will be ready in 6 8 weeks.

#### How to Use Compost

The procedures for the use of compost are:

- Use as potting mix for seedlings or around plants;
- Add a 2-5 cm layer around the drip line of trees;
- Apply twice a year to Australian natives;
- Spread thinly once or twice a year as top dressing for lawns.

(Source: New South Waste Boards (1999))

#### References

New South Wales Waste Boards (1999) Reduce, Reuse, Recycle – Garden and Household Waste.

Friends of the Earth (1998) Low Waste Garden Series.

Northern Sydney Waste Board (2000) Create Your Own Eden - Easy Composting Guide.



(OMPOST BINS



(OMPOST BARRELS



(Source: Northern Sydney Waste Board (2000))

Best Practice O2.02

### WORM FARMING

#### Description

Worm farming is a method in which worms decompose household food scraps into worm castings. Worm castings can be used to provide a rich natural soil conditioner.

#### Purpose

The purpose of the best practice is to promote the recycling of household food scraps by their decomposition in worm farms and the use of worm castings.

#### **Best Practice**

#### What can be Used in Worm Farms

Any household plant based food scraps, shredded newspaper and most compost can be used in a worm farm.

#### How to Set Up a Worm Farm

The procedures for establishing a worm farm are:

- You can use small containers with drainage or purchase a commercially produced worm farm;
- Purchase red or tiger worms through nurseries, by post or look under "worms" in the telephone directory;
- Start with about 1,000 worms;
- Bed the worms in a mixture of shredded newspaper and finished moist compost;
- Add the worms to the surface of the bedding and cover the bin with a natural material;
- Leave them for a week to get used to their new home;
- Store the bin away from extreme temperatures;
- Add food scraps to the top of the bedding;
- Add more scraps when the worms are finished eating these;
- Harvest the worm castings, empty the worms and bedding onto a surface and scrape castings from the outside as the worms will mound towards the centre; and
- Use the ball of worms for a new bedding.

#### How to Use Worm Castings

Worm castings can be used as:

- plant food add 3-6 cm layer around plants and drip line of trees and cover with mulch; and
- as a potting mix add 10-20% castings to a poor potting mix.

(Source: New South Waste Boards (1999))

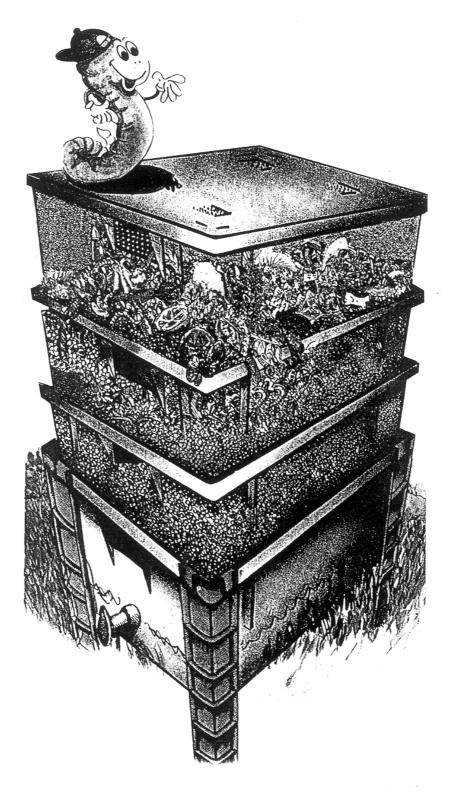
#### References

New South Wales Waste Boards (1999) Reduce, Reuse, Recycle – Garden and Household Waste.

Friends of the Earth (1998) Low Waste Garden Series.

Northern Sydney Waste Board (2000) Create Your Own Eden – Easy Worm Farming Guide.

Best Practice O2.03



Supplied by ReIn Plastics

(Source: Northern Sydney Waste Board (2002))

Best Practice O2.03

### HOUSEHOLD RECYCLING

#### Description

Household recycling involves the recycling of domestic waste materials.

#### Purpose

The purpose of the best practice is to promote the recycling of household waste materials by source separation and placement in the appropriate manner for collection.

#### **Best Practice**

Recycling provides great benefits to our community. It helps save resources, protects the environment, conserves tipping space and saves money by reducing disposal costs at tips. Many household wastes can be recycled. Council is committed to recycling and provides a recycling service.

#### Recycling

Recyclable products should be placed in your recycling bin (Yellow Lid) on collection day. Council collects the following recyclable products:

- Milk cartons and tetra packs;
- Steel cans and empty aerosols;
- Aluminium cans;
- Plastic food and beverage containers numbered 1, 2, 3, 4 or 5 within the recycling logo. Lids can be included but need to be removed from the containers;
- Glass jars and bottles. Lids can be included but need to be removed from the containers; and
- Clean paper and cardboard including newspapers, magazines, phone books, clean and empty pizza boxes.

#### Green Waste

Green waste should be placed in your green waste bin (Green Lid) on collection day. Council collects the following green waste:

- Bushes and prunings cut into maximum lengths of 1.2m (4ft); and
- Vegetative matter with a maximum diameter of 75mm.

#### Kerbside Clean-up

Bulky household rubbish should be placed at the kerbside on collection day. Council collects the following bulky household rubbish:

• Household rubbish up to 2m<sup>3</sup> capacity with a maximum weight of any one item being 30kg including furniture, fridges, beds, toys and appliances.

Council does not collect the following bulky rubbish:

- Builder's waste or demolition material;
- Old paint and oils can be taken to Wicks Road Transfer Station, North Ryde; and
- Old batteries can go to Goodyear in Hunter Street, Hornsby.

#### Best Practice O3.01

For details phone Council's Waste Management Team on 9847 4856 between 8.30am and 5.00pm Monday to Friday.

#### References

Hornsby Shire Council (1992) Reduce, Re-use, Recycle: Gift to the Earth – Recycle. Hornsby Shire Council (2002) New Waste Collection Service – It's not such a prickly problem.

### WASTE COLLECTION SERVICES

#### Description

Council's residential waste collection services include the collection of domestic waste, recyclable materials and green waste. A kerbside clean-up service is also provided.

#### Purpose

The purpose of the best practice is to promote details of Council's residential waste collection services.

#### **Best Practice**

Council's residential waste collection services varies depending on where you live. Council will operate the following waste services for:

### Dwelling-houses and Low and Medium Density Multi-unit Housing Developments in Urban Areas

- Weekly collection of a 140 litre mobile garbage bin for domestic waste;
- Fortnightly collection of a 240 litre mobile garbage bin for recyclable materials;
- Fortnightly collection of a 240 litre mobile garbage bin for green waste; and
- Twice yearly kerbside clean up.

#### Medium/High Density Multi-unit Housing

- Weekly or twice weekly collection of a mobile garbage bin for domestic waste (depending on the size of the bin);
- Weekly collection of a mobile garbage bin for recyclable materials;
- An optional user pays green waste service; and
- Monthly kerbside clean up.

#### High Density Multi-unit Housing

- Up to five day/week collection of 660 litre mobile garbage bin/s or approved containers for domestic waste; and
- Up to a two day/week collection of a 240 litre mobile garbage bin/s for recyclable materials.

#### Dwelling-houses and Low Density Multi-unit Housing Developments in Rural Areas

- Weekly collection of a 140 litre mobile garbage bin for domestic waste;
- Fortnightly collection of a 240 litre mobile garbage bin for recyclable materials; and
- Twice yearly kerbside clean up.

#### Dwelling-houses on Dangar Island

- Twice weekly collection of a 55 litre garbage bin for domestic waste;
- Weekly collection of a 55 litre garbage bin for recyclable materials;
- Fortnightly collection of tied and bundled or bagged green waste; and
- Twice yearly kerbside clean up.

#### **Dwelling-houses in River Settlements**

- Several 660 litre mobile garbage bins kept in the lock up enclosure at Berowra Waters;
- Several 240 litre mobile garbage bins for recyclable materials kept in the lock up enclosure at Berowra Waters; and
- Twice yearly kerbside clean up.

For further information on Council's residential garbage collection services, please phone Council's Waste Management Team on 9847 4856 between 8.30am and 5.00pm Monday to Friday.

#### References

Hornsby Shire Council (2002) New Waste Collection Service – It's not such a prickly problem.

# WASTE AUDITS AND WASTE MINIMISATION PLANS

#### Description

A waste audit is a review of the composition of the various types of waste that find their way into the waste stream. A waste minimisation plan utilises the data obtained from a waste audit to develop strategies to best manage commercial operations and promote waste avoidance, waste reduction, material reuse and the recycling of waste.

#### Purpose

The purpose of the best practice is to identify manuals and services which detail waste audit procedures and waste minimisation plans.

#### **Best Practice**

Council's residential waste collection services for Commercial and Industrial Units includes a:

- Daily collection of a mobile garbage bin for commercial or industrial waste; and
- Daily collection of a mobile garbage bin for recyclable materials.

Commercial and industrial waste accounts for a substantial component of Sydney's waste. The largest contributors to commercial and industrial waste are food retailers, other businesses, manufacturing and transport operations and the hospitality sector (eg. hotels, cafes and restaurants). Much of this waste can be composted and recycled.

Resource NSW has developed a number of initiatives to reduce commercial and industrial waste, including the development of a commercial and industrial waste management manual and the establishment of a waste audits and advisory service.

#### **Commercial and Industrial Waste Management Manual**

The Commercial and Industrial Waste Management Manual - "Waste Makes No Cents" provides a self help guide to assist small and medium sized businesses and industries conduct their own waste audits and to consider alternative approaches to reducing waste in the workplace. The complete manual consists of 6 modules and 4 fact sheets. The modules are based on five key steps and have been tailored to business needs by consultation with a number of industry groups, namely: restaurants and cafes, fast food outlets, offices, home and personal retailing and accommodation.

The five key steps for waste minimisation and management contained in the modules are equally applicable to other businesses which weren't consulted in the preparation of the Manual and are as follows:

- Step 1: Current Waste Services What's in place and who does it?
- Step 2: Waste Characterisation What type of waste do you produce?
- Step 3: Waste Reduction Action Plan What actions are you going to take to reduce your waste?
- Step 4: Establish Your Waste Reduction Targets.
- Step 5: Review and Monitor.

The Manual will help you find out:

- What you are really throwing out in your waste and how much it is costing you;
- How to develop an effective plan to reduce your waste and save you money;
- What the Government is doing to reduce waste and how this impacts on you;
- What your responsibilities are: and
- How to make staff, suppliers and customers help you to reduce your waste.

Waste Makes No Cents is available for purchase from Resource NSW. For further information, contact Resource NSW on 8837 6000.

#### Waste Audits and Advisory Service

The Waste Audits and Advisory Service is being established by Resource NSW to assist small and medium sized businesses with conducting a waste audit and implementing their own waste minimisation and management plan.

Resource NSW has also prepared a series of papers providing useful information about the waste audit process. The paper titled "Obligations of the Waste Auditor Employer" details the responsibilities of waste audit person/organisation/body which employ and utilise certified waste auditors. The paper titled "Waste Auditor Competencies and Responsibilities" addresses the skills and competencies required of a waste auditor to satisfy certification as developed by Resource NSW.

For further information, contact Resource NSW on 8837 6000.

#### References

Inner Sydney Waste Board (1998) A Plan That Can Help Commercial and Industrial Businesses to Save Money by Reducing Waste.

Inner Sydney Waste Board (1998) Waste Makes No Cents.

Inner Sydney Waste Board (1999) Discussion Paper – Obligations of the Waste Auditor Employer

Inner Sydney Waste Board (1999) Discussion Paper – Waste Auditor Competencies and Responsibilities.

Appendices which correspond with the Waste Minimisation and Management DCP and Guide to ensure effective waste management.

#### A1.0 WASTE MANAGEMENT PLAN

- A1.01 Waste Management Submission Checklists
- A1.02 Recycling / Reuse of Solid Waste Materials
- A1.03 Waste Management Centres
- A1.04 Building and Waste Recycling Directory
- A2.0 DEMOLITION OF BUILDINGS
- A2.01 Approximate composition of Sydney Demolition / Refurbishment Materials
- A2.02 Precautions and Procedure for the Disposal of Asbestos from Buildings
- A2.03 Control of Placement of Waste Containers in a Public Place
- A3.0 DESIGN OF BUILDINGS
- A3.02 Ecological Sustainability of Building Materials
- A4.0 CONSTRUCTION OF BUILDINGS
- A4.01 Estimates of Waste Materials in the Construction of a Dwelling
- A5.0 WASTE FACILITY DESIGN
- A5.01 Waste Storage Container Sizes
- A5.02 Garbage Vehicle Characteristics
- A5.03 Recycling Notice
- A5.04 Notes on and Terms of Easements
- A6.0 ON-GOING WASTE MANAGEMENT
- A6.01 Waste Generation Rates
- A6.02 Code for the Storage and Transportation of Contaminated Infectious Waste
- A7.0 MISCELLANEOUS
- A7.01 Definitions and Abbreviations
- A7.02 References

### WASTE MANAGEMENT SUBMISSION CHECKLISTS

The following checklist details the information to be included on drawings for the various activities and land uses. Submission requirements should be checked against information which is submitted.

Land Use or Activity Proposed	Submission Requirements	Submitted (✓)
Demolition, including major renovations and excavation.	<ul> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul>	( )
Residential Subdivision (where involving more than 6 lots)	<ul> <li>location of waste storage and recycling areas and collection area</li> <li>access for garbage collection vehicles (where necessary – i.e. more than 6 lots)</li> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul>	( )
Dwelling Houses and Low Density Multi- Unit Housing. Class 1a buildings as defined in Part A of the BCA	<ul> <li>waste cupboard space <ul> <li>a composting area</li> <li>location of waste storage and recycling areas and collection area</li> <li>access for garbage collection vehicles (where necessary – i.e. more than 6 dwellings)</li> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul> </li> </ul>	( )
Medium, Medium/High and High Density Multi-Unit Housing. Class 1a and 2 buildings as defined in Part A of the BCA	<ul> <li>waste cupboard space</li> <li>a collection area, waste storage and recycling facility or garbage and recycling room</li> <li>a chute system or volume reduction equipment, where appropriate</li> <li>access for garbage collection vehicles (where necessary – i.e. where waste storage facilities are inappropriate at street frontage)</li> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul>	( )
Residential Accommodation, including: boarding houses, guest houses, hostels, lodging houses and backpackers accommodation. Class 1b, 3 and 4 buildings as defined in Part A of the BCA	<ul> <li>waste cupboard space eg. in staff kitchen</li> <li>waste storage and recycling area or garbage and recycling room</li> <li>a collection area, chute system or volume reduction equipment, where appropriate</li> <li>access for garbage collection vehicles (where necessary – i.e. where site characteristics dictate)</li> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul>	( )
Commercial and Industrial Development, including: shops; offices; restaurants; industry; health care and assembly buildings (eg. schools). Class 5, 6, 7, 8, 9a and 9b buildings as defined in Part A of the BCA	<ul> <li>waste cupboard space eg. in staff kitchen</li> <li>waste storage and recycling area or garbage and recycling room</li> <li>a collection area, chute system or volume reduction equipment, where appropriate</li> <li>access for garbage collection vehicles (where necessary – i.e. where site characteristics dictate)</li> <li>on site sorting and storage areas</li> <li>access for vehicles to and on construction site</li> </ul>	( )

#### CHECKLIST 1: Details to be shown on Drawings

The following checklist identifies the applicable sections of the Waste Management Plan which are required to be completed and submitted to satisfy the requirements of the Waste Minimisation and Management DCP. Submission requirements should be checked against information which is submitted.

Land Use or Activity Proposed		Submission Requirements	Submitted (✓)
Demolition, including major renovations and excavation.	•	Complete Section 1 of the WMP	( )
Residential Subdivision (where involving more than 6 lots).	•	Complete Section 1 of the WMP	( )
Dwelling Houses and Low Density Multi-Unit Housing. Class 1A buildings as defined in Part A of the BCA	•	Complete Section 2 and 3 of the WMP	( )
Medium, Medium/High and High Density Multi- Unit Housing. Class 1A, Class 1B, Class 2, Class 3 and Class 4 buildings as defined in Part A of the BCA	•	Complete Section 2, 3 and 4 of the WMP	( )
Residential Accommodation, including: boarding houses, guest houses, hostels, lodging houses and backpackers accommodation. Class 1b, 3 and 4 buildings as defined in Part A of the BCA	•	Complete Section 2, 3 and 4 of the WMP	( )
Commercial and Industrial Development, including: shops; offices; restaurants; industry health care and assembly buildings (eg. schools). Class 5, 6, 7, 8 and 9 buildings as defined in Part A of the BCA	•	Complete Section 2, 3 and 4 of the WMP	( )

CHECKLIST 2: Waste Management Plan (WMP)
Submission Requirements

Source: Northern Sydney Waste Board (1998) Making the Waste Not DCP work for you – a training package, Northern Sydney Waste Board, Sydney.

### RECYCLING/REUSE OF SOLID WASTE MATERIAL

The table below provides suggestions for the recycling and reuse of solid waste materials.

Aggregate	Reuse or recycle for filling, levelling in materials and road base.	
Aluminium doors, windows, fittings	Reuse for second hand building materials Reprocess material.	
Asbestos Sheeting	N/A (Do not reuse or recycle)	
Asphalt & Bitumen	Reuse or recycle for use in road repairs, road surfacing	
Autoclaved Aerated Concrete (AAC)	Recycle for use as cat litter, oil binder and road base	
Carpet Underlay (synthetic & rubber)	Recycle for use as safety barriers, speed humps,	
	packaging (i.e. product protection)	
Carpet	Reprocessed into carpet or packaging (i.e. product protection).	
Concrete	Reuse or recycle for use as filling, levelling materials, road base	
Clay bricks, pavers	Cleaned and/or rendered over for reuse, recycle to be used for aggregates, fill or paving gravel	
Ceramics and Tiles	Sanitary-ware is capable of reuse. Recycle for use as aggregate and use as decorative landscape materials.	
Flooring Products	Reuse "floating" timber flooring as second hand building materials.	
Glass & Glazing	Reuse glazing for second hand building materials. Recycle for use as aggregate for concrete production.	
Green waste	Mulching, composting for reuse as landscaping/fertiliser	
Insulation Products	Some insulation materials are capable of being reused as second hand building materials or recycled via reprocessing.	
Lead, zinc and copper products	Reuse copper, brass and zinc sheeting and plumbing fixtures as second hand building materials or recycle reprocessing	
Paper & Cardboard	Recycle via reprocessing	
Plasterboard	Recycle via reprocessing to new plasterboard or gypsum can be used as an additive to soil.	
Plastics (Pet, HPDE, LPDE)	Recycle via reprocessing	
Roof tile	Reuse or recycle by crushing for use as landscaping and driveways.	
Soils (overburden)	Reuse by power screening for topsoil	
Steel frames & fixtures	Reuse beams, studs and roofing or recycle via reprocessing.	
Stones for Building	Reuse for second hand building materials	
Timber (hardwood beams)	Reuse for floorboards, furniture and fencing.	
Timber (Softwood & Engineered products)	Re-use for formwork, bridging, clocking and propping.	
Timber doors, windows and fittings	Reuse for second hand building materials	

Source: The Combined Sydney Region Organisations of Councils (February, 1996) and TAFE NSW (1997).

N.B. This list is not exhaustive. Innovative re-use and recycling techniques should also be pursued where viable.

### WASTE MANAGEMENT CENTRES

#### WASTE MANAGEMENT CENTRES - TRANSFER STATIONS

ARTARMON	AUBURN	CHULLORA*	ROCKDALE	RYDE	SEVEN HILLS
Address Lanceley Plac Artarmon	e Hill Road Auburn	Muir Road Chullora	Lindsay Street Rockdale	Wicks Road North Ryde	Powers Road Seven Hills
Phone 9439 8521	9648 5316	9793 8416	9597 4506	9888 9381	9674 5300
Householder Yes	Yes	Yes	Yes	Yes	Yes
Commercial Yes	Yes	Yes	Yes	Yes	Yes
Mon - Fri 1am to 5pm	6am to 5pm	6am to 5pm	6am to 5pm	5am to 5pm	6am to 4pm
Sat-Sun 7am to 5pm	8am to 5pm	8am to 5pm	8am to 5pm	7am to 5pm	8am to 5pm

ALL WASTE MANAGEMENT CENTRES ARE CLOSED ON GOOD FRIDAY AND CHRISTMAS DAY.

#### WASTE MANAGEMENT CENTRES - LANDFILLS

	BELROSE TRANSFER STATION	BELROSE LANDFILL	EASTERN CREEK LANDFILL	JACKS GULLY LANDFILL	LUCAS HEIGHTS LANDFILL
Address	Crozier Road Belrose	Crozier Road Belrose	Wallgrove Road Eastern Creek	Richardson Road Narellan	New Illawarra Road Lucas Heights
Phone	9450 1306	9450 1306	9675 1060	046 581 497	9543 1544
Householder	Yes	Yes	Yes	Yes	Yes
Commercial	Yes	Yes	No	Yes	Yes
Mon-Fri	6am to 5pm	6am to 2pm	7am to 4pm	6am to 4pm	6am to 4pm
Sat-Sun	8am to 5pm	8am to 11am	8am to 5pm	8am to 5pm	8am to 5pm

ALL WASTE MANAGEMENT CENTRES ARE CLOSED ON GOOD FRIDAY AND CHRISTMAS DAY.

\* A materials recycling facility is located at both these centres. For details on commercial loads of recyclables please call Waste Service NSW on 9934 7022.

### BUILDING & DEMOLITION WASTE RECYCLING DIRECTORY

Resource NSW has prepared a comprehensive directory of clean fill sites, facilities and outlets for recovery materials and recyclables covering the Greater Sydney Metropolitan Region (attached). Resource NSW has also developed a contemporary Waste Planning Guide as a support document for Councils, business and the community.

Recycled building materials can often be sold to companies which both buy and sell second hand building materials. A listing of companies which buy and sell second hand building materials can be found in The Yellow Pages under the heading of "Building Materials - Secondhand".

# Construction & Demolition Recycling Directory

Sydney Metro 2nd Edition 2002



### RESOURCE

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Map of Sydney Metro Area and Regions	

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#### DISCLAIMER

Whilst every effort has been made to ensure that the information provided is up to date and useful, Resource NSW does not endorse any of the facilities listed, guarantee that they will accept the materials stated or represent that a facility holds all necessary approvals and licences. It is your responsibility to check these details before taking any materials to the places listed.

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### Waste Reduction & Recovery Tips



#### FOR BUILDERS

*Try these steps to reduce waste in residential buildings\*:* 

- Design efficiently.
- Estimate accurately.
- Prefabricate where possible.
- Improve site practices in relation to materials storage, packaging and the collection, sorting and recycling of waste.
- Carefully plan the site to allow for a designated waste collection area.
- Be aware of the local recycling and site cleaning services for bricks, concrete, plasterboard etc and make use of them.
- If you build regularly, develop a comprehensive waste management strategy.

\*Based on HIA (Housing Industry Association) recommendations



#### FOR DEMOLISHERS

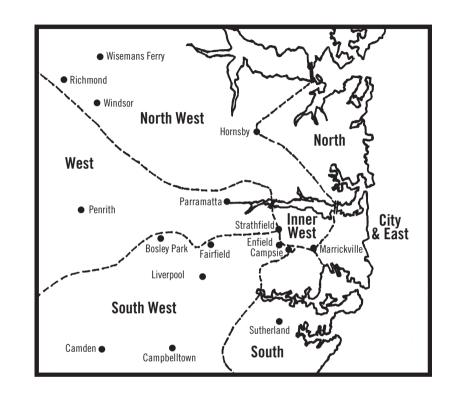
A series of fact sheets and a video that highlight the advantages of deconstruction are available from Resource NSW. They outline the stages in deconstruction:

- Stripping out.
- Roof removal.
- Roof beams and timber removal.
- Internal plasterboard removal.
- Removal of bricks and concrete.
- Cost of deconstruction.
- Asbestos fibro disposal options.

The fact sheets also contain useful information and tips. They identify what materials can be reused or recycled and the costs involved.

Demolition costs can be reduced by up to 40% if demolishers are prepared to sort materials and send them to a recycling facility.

# Map of Sydney Metro Area and Regions



#### Note to Users

Always call ahead to confirm hours of operation and confirm acceptance of materials you wish to reuse, recycle or dispose of.

#### Note to Businesses Listed

We are continually updating this directory. If we have incorrectly cited your details, we apologise for any inconvenience. Please let us know so we can correct them. If you have not been included, please let us know and we can send out an application form for inclusion in future directories.

Resource NSW – Construction & Demolition Recycling Directory

### **Facility / Material Listing**

#### **Aggregates - Suppliers**

The suppliers listed have indicated that they produce and sell material that meets the requirements of the "Draft Specification for Supply of Recycled Materials for Roads Drainage and Fill". This draft specification is available from Resource NSW.

*This list is not exhaustive. Resource NSW make no representation on their behalf.* 

#### Boral Quarries Clunies Ross St 1300 723 999

Prospect

Camellia

Charbel.Bounassif@boral.com.au

Supplier of certified (quality assured) and noncertified recycled and natural quarry products. Material suitable for most applications including major infrastructure work to home improvements.

Contact: Charlie Bounassif, Technical Sales.

Camsons Pty Ltd	
9675 6222	St Marys
0418 221 997	-

busrelations@camsons.com.au

Supplier of all quarried and recycled materials to the Sydney, North Coast, South Coast and greater metropolitan areas.

Contact: Adrian Scott, Business Relations Manager or Dianne Foley, Sales Administrator .

#### **Concrete Recyclers**

#### 14 Thackeray St 9684 6811

glenn@concreterecyclers.com.au www.concreterecyclers.com.au

Next day delivery of roadbase, 40/70 aggregate, 20 mm aggregate, 10 mm aggregate and Envirosand within the Sydney region.

Knight's Syndicate 105 Schofields Rd Rouse Hill 9629 5564, 9629 3864

knighs@bigpond.com.au

Metropolitan Demolitions & Recycling Rear of 396 Princess Hwy St.Peters 9519 3099 7am-4:30pm (Mon-Fri) 7am-3pm (Sat)

Accept concrete. Also accept brick on request. Unlimited quantities. Sell roadbase, aggregates, drainage material and bedding sand.

#### Asphalt

#### NORTH

Kimbriki Recycling & Waste Disposal Centre Kimbriki Rd Terrey Hills 9486 3512 7am-5pm (Mon-Sun)

#### NORTH WEST

Hallinan's Recycling Centre306 Racecourse RdWindsor02 4572 5922Yam-4:30 (Mon-Fri) Tam-3pm (Sat)

#### Knight's Syndicate 105 Schofields Rd Rouse Hill 9629 5564, 9629 3864

7am-4pm (Mon-Fri) 7am-1pm (Sat)

**Resource NSW – Construction & Demolition Recycling Directory** 

#### WEST

Boral RecyclingClunies Ross StProspect1300 723 9996am-5pm (Mon-Fri) 6am-1:30pm (Sat)

#### Brandown

Lot 9, Elizabeth Drive Kemps Creek 9826 1256 6am-5:45pm (Mon-Fri) 6am-4:45pm (Sat) 8am-4:45pm (Sun-Public Hols)

#### Concrete Recyclers

 14 Thackeray St
 Camillia

 9684 6811
 7am-4:30pm (Mon-Fri) 7am-3:30pm (Sat)

### Eastern Creek Waste Management Centre

Wallgrove RdEastern Creek1300 651 1167am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)Limite apply

Limits apply.

#### Ecocycle 155 Newton Rd Wetherill Park 9757 2999

6:30am-5:30pm (Mon-Fri) 6:30am-2pm (Sat)

# Hallinan's Recycling Centre37 Lee Holm RdSt.Marys9833 08837am-4:30 (Mon-Fri) 7am-2pm (Sat)

#### SOUTH WEST

Chullora Recycling ParkMuir RdChullora1300 651 1162am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)Limits apply.

Jacks Gully Waste Management Centre Richardson Rd Narellan 1300 651 116 6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun) Lucas Heights Waste Management

Centre New Illawarra Rd 1300 651 116 6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

#### SOUTH

Kurnell Landfill		
Captain Cook Drive		
9668 8539		
6am-4pm (Mon-Sun)		

Kurnell

#### **Bricks & Pavers**

Also see **Building Materials & Demolition Yards**.

**Bourke Brick** 

23 Robert St 9939 1526. 0418 241 516 Harbord

Suppliers of secondhand commons and original sandstocks.

#### **D&P Timber & Bricks**

6 Warrior Pl 9833 9044, 9867 5132 St.Marys

Pickup large quantities of bricks with lime mortar for cleaning and resale.

# The Brick PitCnr Lane Cove & Fontenoy RdsNorth Ryde9888 78887am-4:30pm (Mon-Fri) 7am-1pm (Sat)

Buy and sell old commons in lime mortar, terracotta and some cement roof tiles. No cement on bricks, materials need to be hand loaded and intact.

# Building Materials & Demolition Yards

#### CITY & EAST

### Building Recyclers

**3 Canal Rd St.Peters 9559 1833** *7am-5pm (Mon-Fri) 7am-3pm (Sat)* 

Sell sandstone, timber and bricks salvaged from demolition sites.

## Metropolitan Demolitions & Recycling

### Rear of 396 Princes Hwy St.Peters 9519 3283

7am-5:30pm (Mon-Fri) 7am-3pm (Sat)

Sell timber, steel and other second hand building materials salvaged from demolition sites.

# Terrace House Factory BuildingMaterials304-308 Harris St9660 6768

9am-5pm (Mon-Sat) 10am-4pm (Sun)

Buy and sell architectural heritage items and accessories including doors, lights, windows, door knobs, chimney pots, bathroom materials and cast iron works. Reasonable condition. Pick up on inspection. Items are resold to public. Carry out repair work on cast iron products. Delivery and pickup available.

#### INNER WEST

Architectural Heritage62 Glebe Point RdGlebe9660 010010am-6pm (Mon-Sun)

Buy and sell structural antiques and fittings including leadlights, lacework, marble/timber fireplaces, grates, floorboards. Collections and delivery available.

# Balmain Stripping Factory124 James StLeichhardt9560 3083

8am-5pm (Mon-Fri) 9am-1pm (Sat) closed first Monday of every month

Buy and sell pre 1930 architectural items including doors, windows, lead lights and ceramics. Must be in good condition.

#### Bower Re-Use & Repair Centre Co-Operative 142 Addison Rd Marrickville 9568 6280

9am-5pm (Mon-Sat) 11am-4pm (Sun) Open 10am Wed

Accept all kinds of donated furniture, household accessories and building materials including timber, doors, pavers and tiles. Goods must be in reasonable condition and repairable. Unlimited quantities. Items resold to public. Carry out repair work on goods. Local delivery and pick-up is available.

# Chippendale RestorationsCnr Parsons & Crescent StsRozelle9810 6066Rozelle

7:30am-5pm (Mon-Fri) 9am-5pm (Sat) 12pm-5pm (Sun)

Buy and sell Federation/Victorian doors, timber, windows and fittings. Very good condition only.

#### **Devine Marine Group**

Cnr The Crescent and City Westlink Rds 9518 9444

7am-5pm (Mon-Fri)

Sell salvaged wharf and bridge materials.

#### Ironwood

(Formerly Rozelle Recycled Building Centre) 88-90 Lilyfield Rd Rozelle 9818 1166

7am-5:30pm (Mon-Fri) 9am-3pm (Sat)

Millers and merchants of reclaimed and recycled timber. For staircases, treads, stringers, risers, post & handrails, exposed beams, decking, table tops and flooring.

#### Reverse Garbage 8/142 Addison Rd 9569 3132

9am-5pm (Mon-Sat) 10am-3pm (Sun) Open until 7:30pm Thursdays

Accept timber off cuts, tiles, display boards, containers, pavers, storage drums, commercial carpet, new paint, office furniture and shop fittings. Pick up available.

### Thunderbird Construction & Procurement

At the foot of Johnston St Rozelle Bay 9571 8299 10am-10pm (Mon-Fri)

Buy and sell unique construction materials.

#### NORTH

**Rozelle Bav** 

Marrickville

Brookvale Recycled Second Hand Building Materials Unit 12, Meatworks Rd Oxford Falls 9451 5566 7am-4pm (Mon-Fri) 7am-3pm (Sat) Buy and sell a wide range of secondhand building materials. Dravin Building Demolition and Alterations 55 Shepherd St Ryde 9807 1363, 0414 802 384

*9am-5pm (Mon-Fri)* Sell timber products - oregon, hardwoods, kitchen/ bathroom accessories, metal products, common bricks with lime mortar, tiles etc salvaged from demolitions.

# Tully's Restorations & BuildingSalvage545 Pacific Hwy9412 1333Sam 4 20pm (Man Eri) Sam Inm (Sat)

8am-4:30pm (Mon-Fri) 8am-1pm (Sat)

Quality restoration building materials. Doors, windows, leadlights etc. Enter from Eric Rd.

#### NORTH WEST

All Steel Merchant & Brokers		
43-45 Princes St	Riverstone	
9838 1533		
8am-6:30pm		

Buy and sell beams, columns, plates, pipe and rail (all steel stocks). Also brokerage and stock purchasing fortnightly update on materials available via customer fax-board list (free service).

<b>Building Materials</b>	& Demolition
Yards continued	

#### Junkyard

Bennet Rd 02 4572 5211

10am-4pm 7 days

Buy and sell all secondhand building materials.

Londonderry

# Recycled Building Material30 Chapman RdVineyard9627 2872Vineyard

7:30am-4pm (Mon-Fri) 7:30am-12pm (Sat)

Sell all timber based materials, bricks (lime mortar), corrugated iron, steel, kitchen/bathroom accessories.

#### WEST

#### As Good As Used Building Materials 89 Dunheved Circuit St.Marys 9673 5398

8am-5pm (Mon-Fri) 9am-3pm (Sat)

Sell timber, roofing, fittings, doors, windows etc salvaged from demolition sites.

# Barter Town SalvageLot 9 Elizabeth DrKemps Creek9826 1078Kemps Creek

9am-5pm (Mon-Sun)

Accept and sell all building materials including timber, corrugated iron, windows, doors, piping, car parts, tiles, bricks, kitchen sinks. Does not accept plastics, glass, asbestos, greenwaste, and tyres.

# Home Recycling Centre12a Parramatta RdLidcombe9748 7899

7am-4pm (Mon-Fri) 7am-3:30pm (Sat)

Sell timber, tiles, bricks, floors, doors, windows, bitumen, concrete, soil and sandstone salvaged from demolitions. Delivery available.

#### Jacobson Metaland 62-70 Silverwater Rd Silverwater 9748 2487

Buy and sell used steel products.

RecycleCorp230 Toongabbie RdGirraween9769 0999Bam-3pm (Sat-Sun)

Sell bricks, timber, used metal products, windows etc

#### Sam's Seconds

**73A Batt St 02 4731 3317** *8am-5pm (Mon-Sat)* 

Buy/accept and sell all secondhand building materials timber, windows, hot water services, roofing, bricks etc.

#### SOUTH WEST

02 4628 5677

# Campbelltown Recycling Centre7 Blaxland RdCampbelltown02 4626 5422Campbelltown

9:30am-6pm (Mon-Fri) 9:30am-3pm (Sat)

Buy/accept and sell building materials in reasonable condition including doors, windows, sinks, timber, tiles, toilets, fireplaces, accessories, non ferrous metals etc.

#### Davco's Secondhand Building Materials 59 Blaxland Rd Campbe

Campbelltown

7am-5.30pm (Mon-Fri) 9am-4pm (Sat)

Buy/accept and sell building materials in reasonable condition including doors, windows, sinks, timber, tiles, toilets, fireplaces, accessories, non ferrous metals etc.

#### Riverside Second Hand Building Supplies 66 Riverside Rd Chipping Norton

#### 66 Riverside Rd 9755 3984

7am-4 pm (Mon-Fri) 7am-12pm (Sat)

Sell timber, bricks, doors, windows salvaged from demolition sites.

#### Sydney Auctions 40 Sharman Close 02 4646 1961

9am-4pm (Tue-Thu) 8:30am-4pm (Fri) 7:30am-5pm (Sat)

Sell all reusable building materials. Receival of general goods: Tuesday to Friday, plants 6am Thursday onwards. Viewing Tuesday to Thursday and Saturday 7:30am to 9am. Auctions every Saturday.

#### SOUTH

#### Ask The Leighton Brothers Port Hacking Rd Miranda 9524 3779, 0410 400 770

Accept, buy and sell all building materials including windows, laminated glass, timber etc. Commercial and domestic.

Former Glory 3-5 Rochester St 9662 6008, 9666 3103 10am-3pm (Mon-Fri)

Floorboards, fireplaces and surrounds, timber – both hardwood and oregon, sandstone, lead light windows and doors and other building materials such as tin etc. All materials at this stage are sold only.

# Quality Recycled Demolitions34 Woodfield BoulevardeCaringbah9542 7203, 0418 249 858

8am-4:30pm (Mon-Fri) 8am-4pm (Sat)

Buy and sell all building materials including doors, windows, fireplaces, kitchen/bathroom accessories, hardwood, oregon, baltic, kauri etc. Collection and delivery available.

#### Second Hand Building Centre Rear 432b West Botany St Rockdale 9567 1322

7:30am-5pm (Mon-Fri) 8am-4pm (Sat)

Buy and sell timber, flooring, roofing, slates, doors, windows, mantels, tiles, metal products. Reasonable condition. Preference for old style good quality material. Collection and delivery available.

#### **MULTIPLE LOCATIONS**

#### Saint Vincent De Paul 9560 8666

All suburbs

9am-5pm (Mon-Fri) 9am-4pm (Sat)

All furniture including doors, wardrobes, cabinets, mirrors, sinks, lounges and mattresses. Reasonable condition. Collections and deliveries must be prearranged and all material must be donated.

#### Salvation Army

13 1640

#### All suburbs

9am-5pm (Mon-Fri) 9am-4pm (Sat)

All furniture including doors, wardrobes, cabinets, mirrors, sinks, lounges and mattresses. Reasonable condition. Collections and deliveries must be prearranged and all material must be donated.

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### Botany

Narellan

**Building Materials & Demolition** Yards continued...

#### COUNTRY

#### **Bathurst Demolition Services** 93 Vale Rd Bathurst 02 6332 6096

Sell second hand building materials such as bridge timbers, sleepers, sand stock bricks. timber, windows, doors etc. salvaged from demolition sites

#### **Cable Drums**

JM Joseph 39 Gladys St 9638 1683

Empty cable drum buyer and seller.

#### **Cardboard & Paper**

#### **DROP-OFF**

It is best to arrange with your supplier to take back all packaging, including cardboard. If that is not possible you may be able to take it to one of these drop-off facilities. Most facilities accept clean cardboard for FRFF.

#### **Amcor Botany Paper Mill** 1891 Botany Rd Matraville 1800 819 000 8:30am-4:30pm (Mon-Fri)

Accept all clean, separated cardboard and paper. Must be flattened and baled. No plastic tapes or other contamination.

**Amcor Paper Recycling** 40 Madeleine St Enfield 9642 8055 8:30am-4:30pm (Mon-Fri)

Accept all clean, separated cardboard and paper. Must be flattened and baled. No plastic tapes or other contamination.

#### **Campbelltown Recycling Centre** 7 Blaxland Rd Campbelltown 02 4626 5422 9:30am-6pm (Mon-Fri) 9:30am-3pm (Sat)

Accept cardboard from public and business.

#### Moatoga Paper Recycling 50 Railwav Pde **Condell Park** 9708 5962

7am-5:30pm (Mon-Fri) 7am-12pm (Sat)

Accept cardboard from public and business.

#### Visvboard

Rydalmere

158-160 Mc Credie Rd Smithfield 1300 368 479 7am-8pm (Mon-Fri)

Accept all clean, separated cardboard and paper. Must be flattened, loose or bundled. No plastic tapes, staples, food scraps, carbon or other contamination. Unlimited quantities. Prearrange for charged collections on 9794 3172.

#### **MULTIPLE LOCATIONS**

**Resource NSW – Construction & Demolition Recycling Directory** 

**Waste Management Centres** 

Artarmon, Auburn, Belrose, Chullora, Eastern Creek . Jacks Gully, Lucas Heights. Rockdale, Rvde, Seven Hills 1300 651 116

Accept up to 200kg per visit of cardboard boxes and packaging. Some centres take larger loads.

#### PICK UP

If you are unable to drop-off cardboard yourself. arrange for someone to pick it up for you. Systems vary and charges apply. Cardboard bins are usually much cheaper than waste bins. Some companies that supply bins for on-site food waste may be able to supply cardboard bins at a cheaper rate.

Matraville

Newport

Marrickville

#### A Charltons Waste Paper Recycling 82 Princes Charles Pde Kurnell 0414 661 344. 9668 9370

Able Waste Paper Recycling PO Box 774 Miranda 9522 2221

**Amcor Recycling Botany Rd** 9695 3472

**Barlea Paper Recycling** 60 Queens Pde 0418 113 012

#### **Bowing Waste Paper & Cardboard** 46/211 Waterloo Rd Marsfield 9214 6772

**Cleanaway Recycling** Mamre Rd (cnr Erskine Park Rd) Erskine 13 1339 Park

Pickup cardboard and paper if you have a general waste bin with them.

#### Enmore Box & Case



7:30am-4pm (Mon-Thurs) 7:30am-2:30pm (Fri)

Buy all clean, separated cardboard boxes in reasonable condition for resale. Can be flattened or boxed. 200 same size box minimum. Boxes resold on site. Will pay 5c-40c depending on condition.

J&D Blue Wastepaper Unit 3, 58-62 Cook St 9668 9237	Kurnell
Jones Waste Service 80 Violet St 9774 4850	Revesby
Metropolitan Recycling 23-35 Shepherd St 9821 3500	Liverpool
MK Muscat Waste Pape Farm Rd 0419 602 354	er Marsden Park
Moatoga Paper Recycli 50 Railway Pde 9708 5962 7am-5:30pm (Mon-Fri) 7am-12p	Condell Park
Bags provided with deposit. Pick minimum.	up 5 bales
Paper-Go-Round 1-3 Gladstone St 9550 4784 9am-5pm (Mon-Fri)	Newtown
Pick up 1 bale minimum. Only ser operations.	rvice small scale
Progressive Recycling 9821-3500	Liverpool
Sita Environmental Serv 13 1335	vices Wetherill Park
Pickup cardboard and paper if yo waste bin with them.	u have a general

#### **Carpet & Floorcoverings**

#### **Carpet Disposals** 620 Forest Rd 9588 6363

8am-5pm (Mon-Fri) 8am-1pm (Sat)

Buy commercial carpets and carpet tile. Resold to public. Reasonable condition 50 metres minimum. All prices for removal and purchases are quoted. Collect and deliver.

#### **Carpet Recyclers** 617 Tower Rd 9791 9151 24 hours, 7 days/week

Buy commercial carpets and carpet tile. Resold to public. Reasonable condition 50 metres minimum. All prices for removal and purchases are quoted. Collect and deliver.

#### **Sydney Carpet Removals** Unit 1, 80 Heathcote Rd Moorebank 9824 3133

8am-5pm (Mon-Fri)

Buy commercial carpets and carpet tile. Resold to industry. Reasonable condition. Commercial quantities only. All prices for removal and purchases are guoted. Collect and deliver.

#### Cleanfill

See Concrete / Brick / Tile (accepted for reprocessing), Mixed Waste, VENM and Wood Waste / Garden Organics.

#### Concrete / Brick / Tile (accepted for reprocessing)

#### **CITY & EAST**

**Bexlev** 

Bankstown

Dial A Dump	
Albert St	
9550 2942	

7am-4:45 (Mon-Fri) 7am-1pm (Sat)

Accept separated or mixed concrete, brick and tile from pre-paid customers.

St.Peters

St. Ives

#### **Metropolitan Demolitions &** Recvcling **Rear of 396 Princess Hwv** St.Peters 9519 3099

7am-4:30pm (Mon-Fri) 7am-3pm (Sat)

Accept concrete. Also accept brick on request. Unlimited quantities. Sell roadbase, aggregates. drainage material and bedding sand.

#### NORTH

**Davis Earth Moving & Quarrying** 138 Wirreanda Rd Ingleside 9450 2288 7am-5pm (Mon-Sun)

Accept separated and mixed concrete, bricks, clay

based products. Fees apply, reduced if materials are separated. Unlimited quantities. Sell roadbase products, aggregate, filling, bricks, concrete, tiles, soil. sandstone.

Concrete Brick & Tile Continued....

#### Greenwoods

Mona Vale Rd 0408 444 456, 0418 444 456 7am - 4pm (Mon-Fri)

Accept clean and separated concrete, bricks. masonary, roof tiles and sandstone. Fees apply.

#### **Kimbriki Recycling & Waste Disposal Centre** Kimbriki Rd **Terrev Hills** 9486 3512

7am-5pm (Mon-Sun)

Accept clean and separated concrete, roofing tiles, asphalt, oversize concrete and brick. Fees apply, reduced if materials are separated. Unlimited quantities. Sell roadbase, asphalt, crushed concrete and cleaned bricks. Delivery and collection available.

#### What's Waste **Meatworks** Ave 9975 1792 7am-5pm (Mon-Fri) 6am-12 (Sat)

Accept concrete and brick. Fees apply.

#### **NORTH WEST**

Hallinan's Recycling Centre	
306 Racecourse Rd	Windsor
02 4572 5922	
7am-4:30 (Mon-Fri) 7am-3pm (Sat)	

#### **Knight's Syndicate** 105 Schofields Rd 9629 5564 or 9629 3864

7am-4pm (Mon-Fri) 7am-1pm (Sat)

Accept asphalt, concrete and bricks. Cheaper rate if separated. Unlimited quantities. No soil accepted. Sell roadbase, asphalt, crushed concrete, crushed tiles cleaned bricks. Delivery and collection available.

#### WEST

#### **Boral Recycling Clunies Ross St** 1300 723 999 6am-5pm (Mon-Fri) 6am-1:30pm (Sat)

Accept source separated asphalt, concrete, brick. Fees apply. Licensed depot. Collect and deliver.

#### Brandown Lot 9 Elizabeth Drive 9826 1256

Kemps Creek

6am-5:45pm (Mon-Fri) 6am-4:45pm (Sat) 8am-4:45pm (Sun-Public Hols)

Accept source separated sand, sandstone, soil, clay, tiles, timber, bricks, concrete, greenwaste and metals. Unlimited quantities. Sell roadbase aggregates, bricks, tiles, soil and sand, Mobile service equipment for on site works. Licensed depot.

#### **Concrete Recyclers**

#### 14 Thackerav St 9684 6811

Camellia

7am-4:30pm (Mon-Fri) 7am-3:30pm (Sat)

Accept separated and mixed concrete, brick. bitumen, sandstone, other hardfills, Unlimited quantities. Fees apply, reduced if materials are separated. Mobile service equipment for on site

#### Eastern Creek Waste Management Centre

#### Wallgrove Rd 1300 651 116

9757 2999

**Eastern Creek** 

7am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept household quantities only of separated asphalt, brick, concrete, and terra-cotta, Fees and limits apply.

#### **Ecocycle** 155 Newton Rd

#### Wetherill Park

6:30am-5:30pm (Mon-Fri) 6:30am-2pm (Sat)

Accept separated and mixed concrete, brick, bitumen, sandstone, and other hardfills. Fees apply.

# works.

**Oxford Falls** 

**Rouse Hill** 

Prospect

#### Concrete / Brick / Tile (accepted for reprocessing) continued...

#### Hallinan's Recycling Centre 37 Lee Holm Rd St.Marvs 9833 0883

7am-4:30 (Mon-Fri) 7am-2pm (Sat)

Accept separated and mixed concrete, bricks, clay based products, sand, tiles, metal, timber, greenwaste, plastic, plasterboard, soil, tyres, asbestos, paper/cardboard and glass. Fees apply, reduced if materials are separated. Preference for commercial quantities. Sell roadbase aggregates, bricks, tiles, asphalt and sand. Mobile service equipment for on site works. Licensed depot. Delivery and collection available.

#### Hannas 3 Duck St 9748 4994

Auburn

5am-8pm (Mon-Fri) 6am-4pm (Sat) 7am-3:30pm (Sun) Extended hours by arrangement

Accept mixed demolition material, concrete, brick, roof tile, tile, clean masonry fill, untreated timber, site clearing/granular fill and soil for recycling.

#### Hassle Street, Road Material **Recycling Centre Cnr Hassel St & Widemere St Wetherill Park** 9609 7928

6.30am-4pm (Mon-Fri) Sat by appointment

Accept clean and separated concrete, profiled asphalt/roadbase. Clean and separated material only. No bricks or other contaminants. Sell crushed concrete and recycled roadbase. Delivery and collection available.

#### **Recycled Resources** 134 Carnavon St Silverwater 9748 3566

6:30am-4pm (Mon-Fri) 6:30am-2pm (Sat)

Accept clean concrete, terra-cotta and cement, No bricks accepted. Source separated material only. Commercial and industrial sizes only. Sell clean crushed concrete and terra-cotta. Mobile service equipment for small quantities on site. Delivery and collection available.

#### SOUTH WEST

#### **Benedicts** Lot 17 Riverside Rd Moorebank 9755 2622

6am-5pm (Mon-Fri) 6am-3pm (Sat)

Accept sand, sandstone, soil, clay, tiles, timber, bricks and concrete. Any condition. Unlimited if delivered. 12 tonne minimium pick up. No asbestos or fibro. Sell crushed brick, concrete and terra-cotta. Licensed depot and weighbridge on site. Collect and deliver.

#### **Chullora Recycling Park** Muir Rd Chullora 1300 651 116

2am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept household quantities only of separated asphalt, brick, concrete, and terra-cotta. Fees and limits apply.

#### **Jacks Gully Waste Management** Centre

#### Narellan

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

**Richardson Rd** 

1300 651 116

Accept asphalt, bricks, concrete, roof tiles, terracotta pipes. Source separated. Fees apply. Unlimited quantities. Sell recycled concrete, clay based products subject to availability.

#### Lucas Heights Waste Management Centre

#### Lucas Heights New Illawarra Rd 1300 651 116

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept asphalt, bricks, concrete, roof tiles and terra-cotta pipes. Source separated. Unlimited quantities. Sell recycled concrete, clay based products and asphalt.

#### **PMT Transfer Station** 81 Gow St 9709 2773

6am-5pm (Mon-Fri) 7am-2pm (Sat)

Accept all excavation material, mixed C&D subject to inspection. Recycled roadbase, aggregates, fill soil, topsoil, limited building materials available for sale. Tyres, stumps, fibro, carpet, mattresses contaminated soil. liquid wastes not accepted. Reduced charges for separated loads.

#### **Recycled Resources** 11B Harp St 9787 2209

7:30am-4pm (Mon-Fri) 7:30am-12pm (Sat)

Accept clean concrete, terra-cotta and cement, No brick accepted. Source separated material only. Commercial and industrial sizes only. Sell clean crushed concrete and terra-cotta. Mobile service equipment for small quantities on site. Delivery and collection available.

#### SOUTH

Padstow

Campsie

#### **Collex Building Recyclers** 38 McPherson St Banksmeadow 9316 6333

7am-4:30pm (Mon-Fri) 7am-3pm (Sat) Closes half an hour earlier for hand unloading.

Accept separated and mixed concrete, tiles, sand, soil, clay based products, timber, trees, carpet, metal, plastic, glass and paper/cardboard, Sell roadbase products, aggregate, filling and bricks, Mobile service equipment for on site works. Licensed depot.

#### Holt Land Rehabilitation Centre

Lot 2 Captain Cook Drive Kurnell 9923 1645

7am-4pm (Mon-Fri) 7am-2pm (Sat)

Accept terracotta roof tiles for recycling.

#### Kurnell Landfill

**Captain Cook Drive** 9668 8539 6am-4pm (Mon-Sun)

Kurnell

Accept asphalt, brick, concrete and terracotta. Cheaper if separated.

#### Drums

#### A1 Drums 34 Wellington St 9627 3707

Riverstone

Buy and sell plastic and metal drums. Collection service available.

#### **Abbey Drums And Pallets** 77 Redfern St

9725-1919

Wetherill Park

Buy and sell plastic and metal drums. Collection service available.

#### **Drums continued...**

#### Better Drums Unit 3/100 Edward St 9627 5575

Buy and sell plastic and metal drums. Collection service available

#### **Crossroad Drum Co.**

34 Harp St 9787 3433

7:30am-4pm (Mon-Fri)

Buy empty plastic and metal drums for recycling and reconditioning. Any condition, charge for drums holding certain residues. No liquid waste. Charge of \$4 disposal fee for drums holding certain residue eg. glue or concrete additives 200 litre sized drums, 10 minimium pick up. Reconditioned drums sold to public. Delivery and collection available.

#### Drum And Waste Solutions 41 Frank St Wetherill Park 9725 1044

8:30am-5pm (Mon-Fri)

Buy empty plastic and metal drums for recycling and reconditioning. Any condition, charge for drums holding certain residues. No liquid waste. 205L sized drums, 50 minimium for pickup. Reconditioned drums sold to public. Disposal fee for drums holding certain residue glue or concrete additives. Delivery and collection available.

#### Drum Distributers

1 Ilma St 9971 2836		Bankstown
7 0.00	 <b>F</b> ::	

7am-3:30pm (Mon-Fri)

Buy empty plastic and metal drums for recycling and reconditioning. Any condition, charge for drums holding certain residues. No liquid waste. Disposal fee for drums holding certain residue eg. glue or concrete additives 205L sized drums, 20 minimium for pickup. Reconditioned drums sold to public. Delivery and collection available.

#### Drum Reconditioners (NSW) 30-32 Powers Rd Seven Hills 9624 6455

7am-5pm (Mon-Fri)

Riverstone

Campsie

Buy empty plastic and metal drums for recycling and reconditioning. Any condition, charge for drums holding certain residues. No liquid waste. 205L sized drums. Disposal fee depending on condition of drums holding certain residues eg. glues, concrete adhesives. Reconditioned drums sold to public. Delivery and collection available.

# Macquarie Drum Services12-14 Box AveWilberforce02 4575 2254

# Tank Management Services3 Clarke StGuildford9632 0594Guildford

6am-4pm (Tues-Thurs)

Buy metal drums for recycling and reconditioning. Good condition, small amount of residue accepted. Unlimited 20, 60, 200 and 205 litre drums. Supply bins and collection service for crushed cans. Drum disposal fee for non-standard and poor conditioned drums. Reconditioned drums sold to public and industry.

#### Fibro Containing Asbestos

Fibro containing asbestos can't be reused or recycled. It must be kept separate from other demolition waste such as concrete and brick so that it doesn't contaminate recycled products. It must be taken to one of the licenced landfill listed below.

Each facility will have wrapping requirements and unloading requirements for fibro containing asbestos. Contact the facility before you take it there.

#### NORTH

#### Belrose Waste Management Centre Crozier Rd Belrose 1300 651 116

4:30am-4pm (Mon-Fri) 7am-11am (Sat) 8am-11am(Sun)

Must be pre-booked. Fees and conditions apply.

Kimbriki Recycling & W	/aste
<b>Disposal Centre</b>	
Kimbriki Rd	Terrey Hills

**9486 3512** *7am-5pm (Mon-Sun)* 

Limit of one tonne. Asbestos must be wrapped in heavy duty builders plastic and wrapped in parcels to be loaded from the customers vehicle, by the customer into a high sided skip.

#### WEST

Elizabeth Drive Landfill Facility1725 Elizabeth DriveKemps Creek02 4774 88667am-5pm (Mon-Fri)

Enviroguard Cnr Mamre & Erskine Park Rd Erskine Park 9834 3411 6am-4:30pm (Mon-Fri) 7am-3:30pm (Sat-Sun)

#### Glenfield Waste Disposals

Campbell St Glenfield 9601 8766 6:30am-4.20pm (Mon-Sat)

Kari & Ghossayn Lot 17-23 Elizabeth Drive 9826 1137 7am-5pm (Mon-Fri) 7am-1pm (Sat) 
 Penrith Waste Services

 842 Mulgoa Rd
 Mulgoa

 02 4773 8778
 Mulgoa

 6am-4:45pm (Mon-Fri) 7am-3:45 (Sat)
 9am-2:45pm (Sun)

#### SOUTH WEST

Jacks Gully Waste Manage Centre	ement
Richardson Rd	Narellan
<b>1300 651 116</b> 6am-4pm (Mon-Fri) 8am-5pm (Sat-S	un)
Must be pre-booked. Fees and conditi	ons apply.
Lucas Heights Waste Mana Centre	agement
New Illawarra Rd Lu	cas Heights

Must be pre-booked. Fees and conditions apply.

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

#### Floorboards

1300 651 116

For suppliers of timber floorboards, also see <u>Building Materials & Demolition Yards</u> and <u>Timber</u>.

William Kelso 0414 900 353

Takes up floorboards from demolition sites.

### Flourescent Tubes & HID Lamps

See <u>Hazardous Waste</u>

#### **Glass - Laminated & Plate**

**Double Bay** 

Smithfield

Dural

#### **Cut-Price Glass** 2/1A Knox Lane 9327 8278. 0411 841 842

They take laminated partition glass from refurbishments.

#### Jay & Kay Glass 129 Woodpark Rd 9632 8588

They take laminated partition glass from refurbishments.

#### Pilkington (Australia) Ltd 8 Euston Rd Alexandria 9550 2911

7am-3pm (Tues-Fri)

Buy any flat glass. No pyroseram (wood fired heater doors), no windscreens, bottles, containers. Only clean, flat glass. Unlimited quantities. No contaminated glass accepted. Delivery and collection available.

#### Southern Glass PO Box 3329 0418 219 200

They take laminated partition glass from refurbishments.

#### **Visy Recycling - Glass Division Cnr Baker and Moore Sts** Botany 9316 4343

7am-5pm (Mon-Fri) 7am-12pm (Sat) 10am-1pm (Sun)

Free drop-off for plate and laminated glass. No frames – glass only. Unlimited quantities. Pick up charge.

#### Landscape Materials

Also see Building Materials & Demolition Yards. Plants. Sandstone and Wood Waste / Garden Organics.

#### Andrew O'Sullivan & Associates 0416 284 228

Accept most plant material, pot plants & garden furnishings. Also timber decking, flooring, amounts of hardwood, block sandstone and paving. No Cocos palms accepted.

#### **Hazardous Waste**

Hazardous wastes include:

- Flourescent tubes and HID Lamps (in commercial quantities).
- Industrial and laboratory chemicals.
- Mercurv. NiCad and Lithium Hydride batteries. PCBs.
- Pesticides and herbicides.

Also contact the FPA on 131 555 for advice on where and how to dispose of these wastes.

#### Chemsal 12 Bushels Pl

Wetherill Park 9604 7533 or 9604 8467

Kooragang

Strathfield

Glendenning

Also recycle fluorescent tubes and HID lamps.

#### Cleanaway

19 Egret St 02 4920 1455 **CWDS** 

9623-0888

**Environmental Waste Managers** 99 Kyle St Rutherford 02 4932 4466

**ERS** Australia 6-8 Rayben St 9832-8766

#### **Lidcombe Liquid Treatment Plant** Cnr of Link & 1 Hill Rds **Homebush Bav** 9934 7120

6:30am-3pm (Mon-Fri) 24hrs/7days for emergencies

Accept paints and chemicals for treatment and disposal. Fees and conditions apply. Give at least one days notice for intended delivery.

#### **Sydney Water** 1800 814 719

Sydney Water hold household chemical collections / drop-off days throughout the year. Call 1800 814 719 for dates and collection points.

#### **Office Furniture**

#### **Booths Office Furniture**

Camperdown 188 Parramatta Rd 9557 5835 8am-4:30pm (Mon-Fri) 10am-4pm (Sat-Sun)

#### **Chair Clinic**

Salisbury Rd (cnr Percival Rd) Stanmore 9560 9113

#### **Chair Doctor**

305 Kent St

9299 1800

Sydney

Auburn

**Complete Office Refurbishment** 8 Box Rd Taren Point 9540 5510

Mini-Cost Office Furniture **104 Adderley St West** 9647 2299

8am-5pm (Mon-Fri) 9am-4pm (Sat)

#### **Recycling Works** 45 Parramatta Rd 9517 2711 10am-5pm (Mon-Sun)

#### Annandale

Buy and sell office equipment, benches, storage cabinets, wardrobes and other home furniture. Collections and deliveries must be prearranged.

#### Oil

#### **PICK-UP SERVICES**

9604 7533 or 9604 8467

Abbra Cadabra Waste O 59 Lalor Rd 9626 7269	ils Quakers Hill
ABC Waste Oil Collectio 6 Camellia Place 9622 1190	n Lalor Park
Clearwater Industrial Se Unit 2/78 Heathcote Rd	rvices Moorehank
9824 3225	MUUICUAIIK
Australian Liquid Recyc 38 Links Rd 9673 1550	lers St Marys
Australian Waste Oil Re	finers
<b>27 Powers Rd</b> <b>9624 3055</b> 6am-5pm (Mon-Fri) On call Sature	Seven Hills
Collect all used, dirty and unwante oily water and hydraulic oil. Any co litres minimium for pick up.	
Chemsal 12 Bushels Pl	Wetherill Park

Coast And Valley Oil Distributers 15 Apprentice Dr Berkeley 02 4388 5911 8am-4:30pm (Mon-Fri)

Pick-up all used, dirty and unwanted oils, oil filters, paints, solvents and greases. Any condition. 200 litres minimium for pick up.

#### Klekies

1 Daintree Place 02 4324 5036

Pick up used engine oil, used oil filters / drums, coolant and contaminated fuels.

#### Nationwide Oil

6 Davis Rd 9604 2611

Oil Collection Services 27 Burlington Rd 0413 742 752

#### Worth Recycling

**458 Rocky Point Rd 8558 5100** *9am-5pm (Mon-Fri)* 

All used, dirty and unwanted oils and oily water. Any condition. 400 litres minimum.

#### **DROP-OFF FACILITIES**

#### NORTH

Artarmon Waste Management Centre Lanceley Place Artarmon 1300 651 116 1am-5pm (Mon-Fri) 5am-5pm (Sat) 7am-5pm (Sun) Accept up to 20 litres of sump oil. Free. Ryde Waste MAnagement CentreWicks RdRyde1300 651 1163am-5pm (Mon-Fri) 7am-5pm (Sat-Sun)Accept up to 20 litres of sump oil. Free.

# Belrose Waste Management Centre<br/>Crozier RdCrozier RdBelrose1300 651 116Belrose6am-5pm (Mon-Fri) 7am-5pm (Sat)Belrose8am-5pm(Sun)Accept up to 20 litres of sump oil. Free.

#### WEST

Gosford

Wetherill Park

Homebush

Sans Souci

Auburn Waste Mana Hill Rd 1300 651 116 4:30am-5pm (Mon-Fri) 8am-	Auburn
Accept up to 20 litres of sum	p oil. Free.
Eastern Creek Waste Centre	e Management
Wallgrove Rd 1300 651 116 7am-4pm (Mon-Fri) 8am-5pi	Eastern Creek
Accept up to 20 litres of sum	p oil. Free.
Seven Hills Waste M Centre	lanagement
Powers Rd 1300 651 116 6am-5pm (Mon-Fri) 8am-5pt	Seven Hills m (Sat-Sun)
Accept up to 20 litres of sum	p oil. Free.
SOUTH WEST	

Chullora Recycling ParkMuir RdChullora1300 651 1162am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)Accept up to 20 litres of sump oil. Free.

Jacks Gully Waste Management Centre Richardson Rd Narellan

#### Richardson Rd 1300 651 116

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of sump oil. Free.

#### SOUTH

Rockdale Waste Management<br/>CentreLindsay StRockdale1300 651 116<br/>Gam-5pm (Mon-Fri) 8am-5pm (Sat-Sun)Accept up to 20 litres of sump oil. Free.

#### **Paints & Thinners**

Small quantities of excess paint and thinners can be disposed of by:

- Leave the lid off paint tins, allow small amounts of paint to dry out inside the tin.
- The tin and dried paint can then be put in the bin.

#### For larger amounts of paint:

- Pour onto newspaper and allowed to dry.
- The paint container can then be wiped clean and recycled.

• Newspaper can go into the rubbish bin. For professional painters, "Paint Clean -Environmental Information for Painters" is available from the EPA website at www.epa.nsw.gov.au/small\_business/painters/ index. Or contact the Master Painters Association (NSW) on 9746 4700.

#### PICK-UP SERVICES

#### Australian Solvent Recyclers 38 Links Rd St Marys 9833 7035 7am-5pm (Mon-Fri)

All flammable liquids including used, dirty and unwanted oils, paints and solvents. Any condition. Unlimited. Gun wash (mixture of solvents used in spray guns). Fees apply. Collect and deliver for commercial quantities only.

#### Chemsal

12 Bushels Pl 9604 7533 or 9604 8467 Wetherill Park

#### Clean Way Solvents Unit 3, 8 Pembury Rd 9820 5144 Zam form (Man Sat)

Minto

7am-6pm (Mon-Sat)

All waste solvents and hazardous material including paints, thinners, oils, oil filters, chemicals, water, coolers and sludge. Any condition. Unlimited . Sell multi-purpose thinners, acetone, wax and grease removers, kerosene, diesel. Fees apply on a per litre basis. Also recycle paint tins.

#### CWDS 9623 0888

Strathfield

All waste solvents and hazardous material including paints, thinners, oils, oil filters, chemicals, water, coolers and sludge. Any condition. Fees apply. Also recycle paint tins.

#### **ERS** Australia

6-8 Rayban St 9832 8766 Glendenning

7am-5:30pm (Mon-Fri)

All flammable liquids including used, dirty and unwanted oils, oil filters, paints, solvents. Any condition. Unlimited. Recoverable liquid sold to industry. Charges apply based on product.

#### Paints & Thinners continued...

#### Industrial Solvents 33 Violet St 9772 4433 8am-5pm (Mon-Fri)

All used, dirty and unwanted paints or solvents. Any condition. 20 litre drums minimium accepted. Recycled paints and solvents. Fees apply depending on type of liquid waste.

#### **DROP-OFF FACILITIES**

#### NORTH

**Artarmon Waste Management** Centre **Lancelev Place** Artarmon

1300 651 116 1am-5pm (Mon-Fri) 5am-5pm (Sat) 7am-5pm (Sun)

Accept up to 20 litres of paint, paint thinners and cleaners. Free.

#### **Belrose Waste Management Centre** Crozier Rd Belrose 1300 651 116

6am-5pm (Mon-Fri) 7am-5pm (Sat) 8am-5pm (Sun)

Accept up to 20 litres of paint, paint thinners and cleaners, Free

#### **Ryde Waste Management Centre** Wicks Rd Rvde

#### 1300 651 116 5am-5pm (Mon-Fri) 7am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners, Free

#### WEST

Revesby

**Auburn Waste Management Centre** Hill Rd Auburn 1300 651 116 4:30am-5pm (Mon-Fri) 8am-5pm (Sat-Sun) Accept up to 20 litres of paint, paint thinners and cleaners, Free,

#### Eastern Creek Waste Management Centre

**Eastern Creek** Wallgrove Rd 1300 651 116 7am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners. Free.

#### Lidcombe Liquid Treatment Plant Cnr of Link & 1 Hill Rds **Homebush Bav** 9934 7120 6:30am-3pm (Mon-Fri)

24hrs/7davs for emergencies

Accept paints and chemicals for treatment and disposal. Fees and conditions apply. Give at least one days notice for intended delivery.

#### Seven Hills Waste Management Centre

Seven Hills

Chullora

6am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners. Free.

#### **SOUTH WEST**

cleaners, Free,

Powers Rd

1300 651 116

**Chullora Recycling Park** Muir Rd 1300 651 116

2am-5pm (Mon-Fri) 8am-5pm (Sat-Sun) Accept up to 20 litres of paint, paint thinners and

**Resource NSW – Construction & Demolition Recycling Directory** 

#### **Jacks Gully Waste Management** Centre

#### **Richardson Rd** 1300 651 116

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners Free

#### Lucas Heights Waste Management Centre

New Illawarra Rd Lucas Heights 1300 651 116

6am-4pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners. Free.

#### SOUTH

#### **Rockdale Waste Management** Centre

Lindsav St 1300 651 116

6am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept up to 20 litres of paint, paint thinners and cleaners. Free.

#### **Pallets**

Also see Wood Waste / Garden Organics for facilities that recycle untreated pallets not suitable for reuse

#### **Abbev Drums And Pallets** 77 Redfern St Wetherill Park 9725 1919

Buy/accept timber and plastic pallets in reasonable condition. Price paid depends on quality. Repaired pallets sold to industry. Delivery and collection available.

#### Affordable Pallets 16 Devon Rd 9829 6899

Ingleburn

7am-3pm (Mon-Thurs) 7am-12pm (Fri)

Buy/accept all standard timber pallets in reasonable condition. Price paid depends on quality. Repaired pallets sold to industry. Delivery and collection available.

#### **Pallets Plus**

Narellan

Rockdale

#### Unit 1.80 Dunheved Circuit St.Marvs 9833 2926

7:30am-4:30pm (Mon-Sat)

Buy/accept all timber pallets depending on size and condition. Reasonable condition. 30 pallets minimum. Refurbished pallets sold to industry. Delivery and collection available.

#### **Smithfield Pallet Repairs** 165 Woodpark Rd 9604 5900

Smithfield

Buy/accept all timber pallets depending on size and condition. Reasonable condition. 30 pallets minimum. Refurbished pallets sold to industry. Delivery and collection available.

#### **Plants**

#### **Alpine Tree Removals** 1099 Old Northern Rd 9651 2444

Dural

Removes and sell mature plants. Fees apply.

#### Landscape Rescue 0416 284 228

Recycle plants and materials otherwise destined for the tip. Collect overgrown or unwanted pot plants, specimen trees and clumpforming plants eg gingers, canna-lillies, clivias and most tropical and unusual specimens. Also accept trees, palms and plants in quantities. Common plants like Cocos-palms and most natives are not salvageable.

#### **Major Demolition Waste Recycling Price Guide**

#### Use this sheet to write in prices for different waste. You can save money by separating your waste!

REGION	FACILITY NAME	SUBURB	PHONE NUMBER	ASPHALT	BRICK	CONCRETE	TILES (terracotta)	SOIL & RUBBLE	WOOD WASTE / Garden organics	MIXED WASTE
<b>CITY &amp; EAST</b>	Dial A Dump	St.Peters	9550 2942	\$	\$	\$	\$	\$	\$	\$
	Metropolitan	St.Peters	9519 3099	\$	\$	\$	\$	\$	\$	\$
	Tipfast	St.Peters	9557 4900	\$	\$	\$	\$	\$	\$	\$
NORTH	Active Tree Services	Ingleside	9450 2977	\$	\$	\$	\$	\$	\$	\$
	Greenwoods	St.lves	0408 444 456	\$	\$	\$	\$	\$	\$	\$
	Kimbriki	Terrey Hills	9486 3512	\$	\$	\$	\$	\$	\$	\$
	What's Waste	Oxford Falls	9975 1792	\$	\$	\$	\$	\$	\$	\$
NORTH WEST	Bio-Recycle	Vineyard	02 4577 6610	\$	\$	\$	\$	\$	\$	\$
	Evergreen	Castlereagh	02 4729 0136	\$	\$	\$	\$	\$	\$	\$
	Hallinan's	Windsor	02 4572 0178	\$	\$	\$	\$	\$	\$	\$
	Knights Syndicate	Rouse Hill	9629 3864	\$	\$	\$	\$	\$	\$	\$
	Riverstone Waste Facility	Schofields	9627 3300	\$	\$	\$	\$	\$	\$	\$
WEST	Boral Recycling	Prospect	1300 723 999	\$	\$	\$	\$	\$	\$	\$
	Brandowns	Kemps Creek	9826 1246	\$	\$	\$	\$	\$	\$	\$
	Concrete Recyclers	Camilia	9684 6811	\$	\$	\$	\$	\$	\$	\$
	Discount Recycling	Rosehill	9898 3444	\$	\$	\$	\$	\$	\$	\$
	Ecocycle	Wetherill Park	9757 2999	\$	\$	\$	\$	\$	\$	\$
	Elizabeth Drive Landfill Facility	Kemps Creek	02 4774 8866	\$	\$	\$	\$	\$	\$	\$
	Enviroguard	Erskine Park	9834 3411	\$	\$	\$	\$	\$	\$	\$
	Hallinan's	St.Marys	9833 0883	\$	\$	\$	\$	\$	\$	\$
	Hannas	Auburn	9748 4994	\$	\$	\$	\$	\$	\$	\$
	Hassle Street, Road Material Recycling Centre	Fairfield	9609 7928	\$	\$	\$	\$	\$	\$	\$
	Recycled Resources	Silverwater	9627 3357	\$	\$	\$	\$	\$	\$	\$
SOUTH WEST	Australian Native Landscapes	Badgerys Creek	9450 1444	\$	\$	\$	\$	\$	\$	\$
	Benedicts Reclamations	Moorebank	9601 2555	\$	\$	\$	\$	\$	\$	\$
	Camden Soil Mix	Narellan	02 4658 1647	\$	\$	\$	\$	\$	\$	\$
	PMT Transfer Station	Padstow	9709 2773	\$	\$	\$	\$	\$	\$	\$
	Recycled Resources	Campsie	9627 3357	\$	\$	\$	\$	\$	\$	\$
SOUTH	Collex Building Recyclers	Banksmeadow	9316 6333	\$	\$	\$	\$	\$	\$	\$
	Kurnell Landfill	Kurnell	9668 8539	\$	\$	\$	\$	\$	\$	\$
MULTIPLE	Waste Management Centres	Atarmon, Auburn, I	Belrose, Rockdale	\$	\$	\$	\$	\$	\$	\$
LOCATIONS	1300 651 116	Ryde, Seven Hills,		\$	\$	\$	\$	\$	\$	\$
		Chullora		\$	\$	\$	\$	\$	\$	\$
		Eastern Creek, Jac	ks Gully, Lucas Heights	\$	\$	\$	\$	\$	\$	\$

#### Plants continued...

#### Tradeaplant

#### www.tradeaplant.com.au mail@tradeaplant.com.au Ph/Fx 9904 4000

Trading site for mature plants. Turn unwanted backyard trees into cash. Don't dump it – Trade it.

#### Plasterboard

Recycling facilities exist for new plasterboard offcuts. There are no well established facilities for recycling old or used plasterboard.

#### **Boral Plasterboard 3 Thackerey St** 9638 0571

8am-4pm (Mon-Fri)

Waste Boral plasterboard (clean, new offcuts only) can be picked-up on request or customers can arrange their own transport. Fees apply. Boral require a site inducted in plant safety procedures before drop-offs commence.

#### Ecocycle

#### 155 Newton Rd 9757 2999

6:30am-5:30pm (Mon-Fri) 6:30am-2pm (Sat)

Accept segregated plasterboard. Fees apply.

#### Jarmax 9772 1197

Collects all dry CSR plasterboard offcuts. Must be dry and source separated. Fees apply. Collections and drop-off must be pre booked.

#### **Mason Transport Contact Boral Plasterboard**

Collect Boral plasterboard for recycling. Must be dry and source separated. Fees apply. Collections must be pre booked.

#### **Pioneer Waste Management**

**Taren Point** 

They supply bins for separation of plasterboard offcuts.

#### Plastic

7 Box Rd

9526 2642

Astron 167 Woodpark Rd

Accept and pick-up a variety of plastics in large quantities.

#### Chromford

Camellia

Wetherill Park

**Padstow** 

9729-0500

120-122 Ballandella Rd	Pendle Hill
9631 6644	
7 20 am Inm (Man Fri)	

7:30am-4pm (Mon-Fri)

Buy and accept shrink wrap. No stretch accepted. Reasonably clean/washed material accepted only. Unlimited if delivered or 5-6 bales for pick up. Sent to manufacturer. Materials are bought/ accepted depending on the quality and quantities.

#### Donmar 21-25 Dav St

9755 3305

Lansvale

Smithfield

Recovery and re-use of all types of coloured and natural plastic such as HDPE, PP, PET, LDPE, PVC, Poly-Carbonate and Styrene.

Gem Plastics International Ptv Ltd 9 Warrior Place St.Marvs 9833 3255 fax: 9833 3288 web: www.thomasthoms.com.au 7:30am-4:30pm (Mon-Fri)

Buy all Low Density Polethylene (LDPE) including black, orange and clear garbage bags, squeeze bottles, irrigation tube, mulch film. Reasonably clean/washed material accepted only.

**Resource NSW – Construction & Demolition Recycling Directory** 

#### **Plastic Recycling Services** 17 Loftus St Riverstone 9838 1230

7am-8pm (Mon-Fri)

Buy and accept LDPE, HDPE and PP sheets, films (including shrink wrap and stretch) and bags. Reasonably clean/washed material accepted only.

#### Simsmetal - Plastic Unit 86-88 Milperra Rd 9792 3370

7:30am-4:30pm (Mon-Fri)

Buy and accept LDPE and HDPE sheets, film and pipes. Reasonably clean/washed material accepted only. Compressed - 1tonne. 8-10 bales for pick up. Materials are bought/ accepted depending on the quality and quantities.

#### Zubo

#### 80 Middle Harbour Rd

9416 5053 9am-5pm (Mon-Fri)

Accept shrink wrap, Compacted, clean and baled. Industrial sizes only. No PVC accepted, Will collect large industrial quantities only.

#### Polystryene

MAG Foamwax 8-10 Nicholas St 9649 6248

Recycle expanded polystyrene from packaging and waffle pods. Must be clean. You can drop off or call them to pickup any scrap you have and don't want. Call for a quote.

#### **Roof Tiles**

Also see Building Materials & Demolition Yards. For facilities that accept roof tiles for crushing. see Concrete / Bricks / Tile (accepted for reprocessing)

#### **Benson Heritage Roof Tile Supplies** 246 Revnolds Rd Londonderry 02 4578 1037

7:30am-5:30pm (Mon-Fri) 9am-12:30pm (Sat)

Buy terra-cotta, ceramic and concrete tiles. Must be clean and unbroken. Specialising in pre war and older styles. Collection and delivery available.

#### **DJ Daisley & Sons**

162 Parramatta Rd 9798 7075

Ashfield

Buy and sell terra-cotta roof tiles and secondhand slate.

#### **Roof Tile Recyclers**

#### **16 Sleigh Place** Wetherill Park 9756 3350

7:15am-5pm (Mon-Fri) 8am-2pm (Sat)

Buy and sell all kinds of roof tiles including federation tiles, chimney pots and finials in reasonable condition. Deliver and pick-up service.

#### Sand

#### **Benedicts**

146 Newbridge Rd 9755 2622

Moorebank

6am-5pm (Mon-Fri) 6am-3pm (Sat)

Accept sand. Fees apply.

#### **Camden Soil Mix Glenlee Rd** 02 4658 1647

Narellan

7am-4.30pm (Mon-Fri) 7am-12pm (Sat)

Receive and process uncontaminated sand from excavation and building sites in the Sydney region. Used as a base for many sand / soil blends for the landscaping market.

Lidcombe

Revesby

Lindfield

#### Sand continued...

#### **Concrete Recyclers** 14 Thackerav St Camellia 9684 6811 7am-4:30pm (Mon-Fri) 7am-3:30pm (Sat)

Accept sand. Fees apply.

Hallinan's Recycling Centre St.Marys 37 Lee Holm Rd 9833 0883 7am-4:30 (Mon-Fri) 7am-2pm (Sat)

Accept sand. Fees apply.

#### Holt Land Rehabilitation Centre

Lot 2 Captain Cook Drive Kurnell 9923 1645 7am-4pm (Mon-Fri) 7am-2pm (Sat)

Accept sand for free. Sell sand.

#### Pile & Bucket Bav St 9328 4477

Give away sand for free from their excavations in the Eastern Suburbs.

#### Sandstone

For suppliers of whole stone also see **Building** Materials & Demolition Yards.

For recycling of sandstone also see **Concrete** / Brick / Tile (accepted for reprocessing).

#### Sydney Secondhand Sandstone Company Spicer Rd **Oxford Falls** 9905 7151. 0408 259 155

Buy and sell good quality sandstone.

#### **Scrap Metal**

Also see Mixed Waste as many facilities also accept scrap metal.

#### **CITY & EAST**

Anglo Metal 373-377 Belmont St Alexandria 9557 4487

#### **Australian Metal Cooperative** 15 Bourke Rd Alexandria 9319 6295 7:30am-4pm (Mon-Fri)

Buy metal products, eg. Computer equipment. electric motors, non-ferrous metals ( aluminium lead, zinc, copper etc).

#### George Campbell & Co **18 Hutchinson St**

St Peters

7am-4:30pm (Mon-Fri) 7am-12pm (Sat)

Buy all non ferrous products and metals and large quantities of steel. Any condition, more paid for uncontaminated metals.

#### Sell & Parker

15 Amelia St

9519 6821

**Double Bav** 

Waterloo

9319 2633 6am-5pm (Mon-Fri) 6:30am-2:30pm (Sat)

Buy all ferrous and non ferrous metals and metal products, including whitegoods. Any condition, higher price for separated non ferrous metals.

#### **INNER WEST**

**Aaron Scrap Metal** 9 Chalder St Marrickville 9557 1617

8am-4:30pm (Mon-Fri) 8am-11am (Sat)

Buy all non ferrous metals and products. No steel, Any condition. Higher price for source separated metals. Materials are bought/ accepted/ charged for depending on the quality and quantities. Collection available.

#### Auscrap

26 Gladstone St	Newtown
9516 3078	
7:30am-3:30pm (Mon-Fri) 7:30am-12p	om (Sat)

#### NORTH

#### **Associated Scrap Metal** 6 Winhourne Rd Brookvale 9905 2240

7:30am-4:30pm (Mon-Fri) 7:30am-12pm (Sat)

Cash buyers of all types of scrap metal. Pick up service available.

#### **Brookvale Metal Recyclers** 26 Dale St Brookvale 9905 6435

7:30am-4pm (Mon-Fri) 7:30am-12pm (Sat)

Buy all non ferrous products and metals. Any condition - more paid for uncontaminated metals. Unlimited if delivered. 200kg minimium pick up. Imports resold to public.

#### **North Shore Scrap Metal Recyclers** Rear of 100 West St **Crows Nest** 9955 3337

7:30am-4:30pm (Mon-Fri) 8am-11am (Sat)

Buy all ferrous and non ferrous metals. Any condition. Unlimited, pick up 50-100kg minimium.

#### **NORTH WEST**

All Steel Merchant & Brokers 43-45 Princes St Riverstone 9838 1533 8am-6:30pm

Buy and sell beams, columns, plates, pipe and rail (all steel stocks). Also brokerage and stock purchasing fortnightly update on materials available via customer fax-board list (free service).

#### **Hornsby Scrap Metal** 39a King Rd 9477 5702 8am-4:30pm (Mon-Fri) 8am-11:30 (Sat)

Buy products and metals. For xample: copper. zinc. aluminium, stainless steel etc. Any condition. Unlimited, Imports resold to public, Pick up available. Will accept steel but will not buy it.

#### WEST

#### Burns H E & Sons 15 Welder St 9624 8666

**Seven Hills** 

Hornsby

7am-4pm (Mon-Fri) 7am-1pm (Sat)

Buy all non ferrous products and metals specialising in aluminium and stainless steel. Source separated materials only. Unlimited. Preference for stainless steel sheets.

#### **Cookes Metal Recyclers** 82 Asquith St 9748 1564

Silverwater

8am-4pm (Mon-Thurs). 8am-2pm (Fri-Sat)

Buy all metals and metal products (60 grades). Any condition. Unlimited commercial quantities. Recoverable materials sent to recyclers. Higher prices for uncontaminated metals. Collection available.

#### Scrap Metal continued...

#### Dickson Recycle Industries 40 Victoria St Smithfield 9725 1711

Recycle copper, non-ferrous and steel.

#### Foundry Metals Pty Ltd 4 Donald St 9892 3788

7am-4:30pm (Mon-Fri) 7am-12pm (Sat)

Buy all non ferrous products and metals and small amounts of reuseable steel. Any condition, separated preferred. Unlimited if delivered pick up. 1 tonne minimum. Resold to manufacturers except small quantities of reuseable steel piping sold to public. No sealed containers accepted.

Guildford

Smithfield

Smithfield

Auburn

#### J&M Metals 13 Long St 9725 2363

7am-5pm (Mon-Sat)

Buy all ferrous and non ferrous metals and metal products. Any condition, higher price for separated non ferrous metals. Unlimited if delivered or based on bin dimensions.

#### MRI 163 Chifley St 9729 4999

Accept scrap metal from electronic, electrical equipment and appliances and old and reusable computers. Some they salvage, some they ungrade and resell. They may charge for collection if nothing salvagable. If they are quite usable, they may pay up to \$50 each. Charge \$15 to drop off a monitor.

#### Norman's Scrap Metal

#### 6 Bligh St 9748 0611

7:30am-5pm (Mon-Fri) 7:30am-4pm (Sat)

Buy all ferrous and non ferrous metals and metal products. Any condition, higher price for separated non ferrous metals.

#### Norman's Scrap Metal 34 Peachtree Rd 02 4732 1683

7:30am-5pm (Mon-Fri) 7:30am-4pm (Sat) 7:30am-3pm (Sun)

Buy all ferrous and non ferrous metals and metal products. Any condition, higher price for separated non ferrous metals.

#### Parramatta Scrap Metal 12 North Rocks Road Nth Parramatta 9630 2974

7:30am-4pm (Mon-Fri) 7:30am-12pm (Sat)

Buy all non ferrous products and metals. Any condition. Unlimited if delivered, 1 tonne minimium pick up.

#### RecycleCorp 230 Toongabbie Rd 9769 0999

8am-5pm (Mon-Fri) 8am-3pm (Sat-Sun)

Buy all metals including old fridges, stoves, beams, taps, piping, awnings. Any condition, separated preferred. Unlimited - pick up on inspection.

#### Sell & Parker 45 Tattersall Rd

9621 2633

Blacktown

Girraween

Penrith

6am-5pm (Mon-Fri) 6:30am-2:30pm (Sat)

Buy all ferrous and non ferrous metals and metal products, including whitegoods. Any condition, higher price for separated non ferrous metals.

#### Western District Scrap Metal 30 Tattersal Rd Blacktown

**9622 4528** 7am-4:30pm (Mon-Fri) 7am-12pm (Sat)

#### SOUTH WEST

#### All Metal Industries 10 Gordon Parker St 9773 9284

Buy all ferrous and non-ferrous metals, cable, transformers.

#### AMR

16 Woorang St	Milperra
9792 1366	

Revesby

**Chipping Norton** 

7:30am-4pm (Mon-Fri) 7:30am-12pm (Sat)

Buy and accept all non ferrous scrap metal and metal products. Zinc, copper, aluminiun, brass, lead, stainless steel, batteries etc. Will accept steel but will not buy it.

#### **Barca Metals**

24-28 Childs Rd 9725 6411

7am-5pm (Mon-Fri ) Sat 8am-1pm (Sat)

#### Liverpool City Recyclers 374 Newbridge Rd Moorebank 9602 4330

7:30am-4pm (Mon-Fri) 7:30am-11am (Sat)

Buy all ferrous and non ferrous metals and metal products. Car bodies, whitegoods, steel, batteries, radiators. Any condition, higher price for separated non ferrous metals.

# Resource Recycling Technology3b Williamson RdIngleburn9618 56551

9am-5pm (Mon-Fri)

Buy/accept all ferrous and non ferrous metals, metal products, cable, computers, mainframes. Any condition, higher price for separated non ferrous metals. Unlimited if delivered, 1 tonne min pick up. Recoverable materials sent to appropriate recyclers.

**Resource NSW – Construction & Demolition Recycling Directory** 

#### Riverside Metal Industries 37 Violet St Revesby 9771 1122

7:30am-3pm (Mon-Thur) 7:30am-12:30pm (Fri)

Buy all ferrous, non- ferrous metals and metal products. Separated metals only Unlimited. Ingots sold to industry. Supply and collect bins for metal separation to industry.

#### Sanalco Pacific

### 1 Monier Square (off Liewellyn Ave) Villawood 9725 6699

7:15am-5:30pm (Mon-Fri) 7am-12pm (Sat)

Buy all non ferrous products and metals specialising in copper electrical cable. Any condition, more paid for uncontaminated metals. Unlimited if delivered. 1 tonne minimium pick up. Imports resold to public. Will accept steel in very large quantities if pre-arranged.

#### Southern Cross Metals 13-17 Yamma St

Sefton

Ramsgate

31

7:30am-4pm (Mon-Fri) 8am-12pm (Sat)

Buy all non ferrous products and metals. Any condition, more paid for uncontaminated metals. Unlimited. Imports resold to public. Will accept steel but will not buy it.

#### SOUTH

9645 1444

All Metal Industries 17 Tumbridge St 9529 4423 7am-4pm (Mon-Fri)

Chantler's Metal Recyclers (NSW) 31 Captain Cook Drive Caringbah 9524 8813

7am-5pm (Mon-Fri) 7am-12pm (Sat)

Buy all metals including old fridges, stoves, beams, taps, piping, awnings etc. Any condition. Unlimited - pick up on inspection.

#### Scrap Metal continued...

Hitechnology Metal Recyclers	283 Coward St 9669 6477	Mascot
25 Park Rd Hurstville 9585 0113	43 Ashford Ave 9771 6711	Milperra
Recycle metals from computer components.	76 Christie St	St Marys
Metal Salvage Industries	9623 0391	
1 Anderson St Botany 9790 7466	31 Frank St 9604 4000	Wetherill Park

**DEPOTS:** 

**Waste Management Centres** 

Rockdale, Rvde, Seven Hills

accepted at some centres.

Soil & Rubble

than retiling with new tiles.

**Obsolete Tiles** 

reprocessing).

Tiles

adhesive.

3 South St

9684 6333

and sell.

1300 651 116

Artarmon, Auburn, Belrose, Chullora,

Eastern Creek . Jacks Gully, Lucas Heights.

Accept aluminium, copper, brass and steel. Up to

200kg per visit. Also accept whitegoods (fridges,

stoves and washing machines), up to 4 per visit

and car bodies (only at Chullora, Eastern Creek,

All fluids are to be drained. Larger loads are

Narellan, Lucas Heights and Rockdale), 1 per visit.

See Wood Waste / Garden Organics. VENM. Mixed

Waste and Concrete / Brick / Tile (accepted for

Wall and floor tiles can be salvaged by pouring hot

**Rvdalmere** 

soapy water down the back of them to loosen the

Consider replacing a few damaged tiles rather

The largest range in old wall and floor tiles. Buy

Buyers of all ferrous and non-ferrous scrap metal and insulated cable.

#### MULTIPLE LOCATIONS

#### **Metalcorp Recyclers** Head Office 9922 4622

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Buy all metals including old fridges, stoves, beams. Any condition. Unlimited if delivered or based on bin dimensions 3 tonne minimium

#### DEPOTS:

7am-4pm (Mon-Fri) 7am-11an	n (Sat)
79-81 Stephen Rd 2019	Botany
9666 4157	
53 -57 Riverside Rd	<b>Chipping Norton</b>
9755 3000	
56 Somerset St	Minto
9820 3509	
47 Cowpasture Rd	Wetherill Park
9756 2635	

#### Simsmetal Head Office 9771 6711

Buy and accept all non ferrous scrap metal and metal products . Any condition, separated preferred. Unlimited. Zinc, copper, aluminiun, brass ingots. Materials are bought/ accepted/ charged for depending on the quality and quantities.

#### Santa Maria Tiles 196 Avoca St 9399 6368 9:30am-5pm (Mon-Fri) 9:30am-1pm (Sat)

Specialists in old and discontinued tiles. Buy and sell.

#### **Tree Trunks & Roots**

See Wood Waste / Garden Organics.

#### Timber

For sellers of secondhand timber, also see **Building** Materials & Demolition Yards. For untreated timber not suitable for reusing see Garden Organic /Timber Waste.

#### **Artistic Popular Furniture** 10 Raglan Rd 9644 3054

Buy good quality salvaged oregon for use in furniture manufacture.

#### **Ironwood (Formerly Rozelle Recycled Building Centre)** 88-90 Lilvfield Rd 9818 1166

7am-5:30pm (Mon-Fri) 9am-3pm (Sat)

Millers and merchants of reclaimed and recycled timber. For staircases, treads, stringers, risers, post & handrails, exposed beams, decking, table tops and flooring.

#### Kauri'd Away Shop 6 49 Waterloo St 9970 5522. 0402 705 470

8am-5pm (Mon-Fri)

Buy timber and old pieces of furniture. Older growth timbers preferred. Make furniture from recycled timber.

#### **Second Hand Building Centre** Rear 432b West Botany St Rockdale 9567 1322

7:30am-5pm (Mon-Fri) 8am-4pm (Sat)

Buy and sell dressed hardwood and oregon suitable for flooring, joinery, large structural timbers, posts and beams.

#### **Tyres**

Randwick

Auburn

Rozelle

#### **Kimbriki Recycling & Waste Disposal Centre** Kimhriki Rd **Terrey Hills** 9486 3512 7am-5pm (Mon-Sun)

Accept maximum of five. Fees apply.

#### **Rubber Recycling Pty Ltd** 2/51 Day St 9724 6511

Lansvale

8am-5pm (Mon-Fri)

Charge for accepting passenger and light truck tyres. Any condition. Unlimited. No large truck tyres.

#### Tyrecycle **Cnr Mamre & Erskine Park Rds** 9834 6111

**Erskine Park** 

Accept all tyres. Fees apply. Pick up service available.

#### Waste Management Centres

Artarmon, Auburn, Belrose, Chullora, Eastern Creek, Jacks Gully, Lucas Heights, Rockdale, Ryde, Seven Hills 1300 651 116

Whole car tyres accepted at all facilities. Artarmon, Auburn, Belrose, Chullora, North Ryde, Rockdale and Seven Hills only 5 per visit. Large whole tyres accepted at Jacks Gully and Lucas Heights. (Must be pre-booked). Fees apply.

9am-4pm (Mon-Fri) 10am-1pm (Sat)

# Narrabeen

#### VENM

VENM is virgin excavated natural material.

Holt Land Rehabilitation Centre Lot 2 Captain Cook Drive Kurnell 9923 1645

Call for an application form.

#### M.L. Friend's Earthworks 0438 393 003, 0409 393 003

Arranges DA approved sites to accept topsoil, clay, clay/shale, shale, sandstone, concrete, general clean and hard fills. Materials accepted and supplied for; soil redemption, water retention bays, creek restoration, landscaping, markets gardens and landfill requirements.

#### Windows

See <u>Building Materials & Demolition Yards</u> and <u>Glass – Laminated and Plate.</u>

#### Whitegoods

For recycling of whitegoods see <u>Scrap Metal</u>. Some <u>Mixed Waste</u> facilities also accept white goods for recycling.

#### Best Buy Appliances 22 Parramatta Rd 9647 2110

Buy and sell whitegoods (dishwashers, dryers, fridges and washing machines).

#### Crazy Charlies 12 City Rd 9211 4558

Chippendale

Lidcombe

Buy and sell all reconditioned whitegoods. Dishwashers, dryers, fridges, washing machines.

#### Ghama Electrics 1428 Canterbury Rd

9796 7299

9712 5499

9516 3161

Punchbowl

Petersham

Buy and sell stoves, fridges, washers, dryers and air conditioning.  $\label{eq:stoves}$ 

#### O'Leary Electrical 7 Ramsay St

Five Dock

Buy and sell used electrical and gas stoves. Prefers gas stoves.

#### Recon Appliances 88 New Canterbury Rd 9568 2446

Sell reconditioned stoves and fridges. Buy stoves in quantity.

**The Battlers Friend** 

#### 36 Parramatta Rd

tta Rd Stanmore

Buy and sell reconditioned fridges and washing machines.

Waste Management Centres Artarmon, Auburn, Belrose, Chullora, Eastern Creek, Jacks Gully, Lucas Heights,

Rockdale, Ryde, Seven Hills 1300 651 116

Accept white goods - fridges, stoves and washing machines - up to 4 per visit - for recycling.

#### Wood Waste/ Garden Organics

#### NORTH

Active Tree Services	
9 McCowan Rd	Ingleside
9450 2977	-
Hours to suit client	

Accept, timber, timber off cuts and garden organics. No steel or concrete in material. Can handle nails, bolts and dirt. Unlimited quantities. Sell mulch and compost. Material recycled to be used on site or sold by client, or Active Tree Services will collect excess. Mobile service equipment for on site works. Delivery and collection available.

#### Artarmon Waste Management Centre

Lanceley Place 1300 651 116 1am-5pm (Mon-Fri) 5am-5pm (Sat) 7am-5pm (Sun)

Accept timber, pallets, crates, fence palings, grass clippings and prunings. Weeds are accepted for composting if pre-sorted from mixed waste. Tree branches/timber up to 1m long/150mm diameter. Must not be chemically treated, painted, stained or contain other materials such as bricks, metals or general rubbish. Fees apply.

#### Belrose Waste Management Centre Crozier Rd Belrose

**1300 651 116** 6am-5pm (Mon-Fri) 7am-5pm (Sat) 8am-5pm(Sun)

Accept same as for Artarmon WMC.

#### Kimbriki Recycling & Waste Disposal Centre Kimbriki Rd Terrey Hills 9486 3512

7am-5pm (Mon-Sun)

Accept all garden organics, untreated and unpainted timber. Must be separated. Unlimited quantities. Fees apply except to small resident loads. Sell mulch. Will deliver commercial quantities of mulch.

#### NORTH WEST

#### **Bio-Recycle** 302 Windsor Rd 02 4577 6610 7am-5pm (Mon-Fri)

Artarmon

Vineyard

Accept branches, trees, grass clippings, soil. Prefer clean, unbagged materials. 30 cubic metres minimum. Buy/charge depending on quality. Sell compost, soil mix and top dressing. Delivery and collection available.

#### Ryde Waste Management Centre Wicks Rd Ryde 1300 651 116

5am-5pm (Mon-Fri) 7am-5pm (Sat-Sun)

Accept timber, pallets, crates, fence palings, grass clippings, prunings. Weeds are accepted for composting if pre-sorted from mixed waste. Tree branches/timber up to 1m long/150mm diameter. Must not be chemically treated, painted, stained or contain other materials such as bricks, metals or general rubbish. Fees apply.

#### Envirogreen 358 Castlereagh Rd 02 4729 0136

9am-3pm (Mon-Fri)

Accept all uncontaminated garden organics, untreated and unpainted timber, soil, clippings, trees and branches. Unlimited quantities. Charges apply. Reprocessed into compost and sold to industry. Delivery available.

#### WEST

#### Brandown

#### Lot 9, Elizabeth Drive Kemps Creek 9826 1256

6am-5:45pm (Mon-Fri) 6am-4:45pm (Sat) 8am-4:45pm (Sun)

Accept vegetation (including tree stumps and untreated timber). Fees apply.

#### Ecocycle

#### 155 Newton Rd 9757 2999

Wetherill Park

Auburn

Castlereagh

6:30am-5:30pm (Mon-Fri) 6:30am-2pm (Sat)

Accept segregated untreated timber and wood waste. Fees apply.

#### Elizabeth Drive Landfill Facility 1725 Elizabeth Drive Kemps Creek 02 4774 8866 Zem form (Men Fri)

7am-5pm (Mon-Fri)

Accept separated untreated wood waste for mulching. Fees apply.

#### Hannas 3 Duck St

**9748 4994** 5am-8pm (Mon-Fri) 6am-4pm (Sat)

7am-3:30pm (Sun) Extended hours by arrangement

Accept untreated timber for mulching and recycling. Fees apply.

#### SOUTH WEST

Australian Native LandscapeLot 22 Martin RdBadgerys Creek9450 1444

7am-5pm (Mon-Fri) 7am-4pm (Sat)

Accept timber, timber off cuts, garden organics and excavated soil/sand. Reasonable and separated preferred. Sell soil mixers/conditions/ top dressing/compost, chips and mulch. Materials are bought/ accepted/charged for depending on the quality and quantities. Delivery and collection available.

Narellan

7am-4:30pm (Mon-Fri) 7am-12pm (Sat)

Receive and process all timber waste including building waste, pallets and assorted wood waste. Products produced include mulches, decorative mulches, alternative energy fuels, base material for particleboard and compost.

Receive and process all forms of green waste both domestic and commercial including grass clippings, all prunings, tree waste including tree stumps and trunks – unlimited. Products produced include mulches, soil conditioners, garden mixes and composts available ex yard or delivered.

Receive and process uncontaminated soil – unlimited. Used as an ingredient in the various soil blends.

#### SOUTH

apply.

Kurnell Landfill	
Captain Cook Drive 9668 8539	Kurnell
6am-4pm (Mon-Sat)	
Accept separated timber and wood waste.	Fees

Licensed Landfills

This is a list of landfills that accept solid and inert waste in the Sydney metro area. Landfilling of solid and inert waste requires an EPA licence. Not all of these facilities are open to the public and licence conditions do change.

*For the up-to-date list of licenced facilities and the conditions of the licence visit this website: www.epa.nsw.gov.au/prpoeo* 

#### CITY & EAST

Dial A Dump Albert St 9550 2942 7am-4:45 (Mon-Fri) 7am-1pm (Sat) Inert and Solid Waste Landfill.

#### **INNER WEST**

Cheltenham Rd Landfill34 Cheltenham RdCroydon9744 37777:30am-4pm (Mon-Fri)Environmentally Sensitive Landfill.

#### NORTH

Belrose Waste Management CentreCrozier RdBelrose1300 651 1164:30am-4pm (Mon-Fri) 7am-11am (Sat)4:30am-4pm (Mon-Fri) 7am-11am (Sat)8am-11am (Sun)Solid Waste Landfill.Solid Waste Landfill.

#### Greenwoods

**Mona Vale Rd 0408 444 456, 0418 444 456** *7am - 4pm (Mon-Fri)* Solid Waste Landfill. Kimbriki Recycling & WasteDisposal CentreKimbriki RdTerrey Hills9486 35127am-5pm (Mon-Sun)

Solid Waste Landfill.

#### NORTH WEST

Hawkesbury City Waste **Management Facility** The Driftway South Windsor 02 4572 5489 8am-4.15pm (Mon-Sat) Inert and Solid Waste Landfill. **Riverstone Waste Facility** 127 Burfitt Rd **Schofields** 9627 3300 Solid Waste Landfill. Vinko & Draga Hlebar North St **Schofields** Solid Waste Landfill. WEST

**Kemps Creek** 

37

#### Brandown Lot 9, Elizabeth Drive Kemps 9826 1256 6am-5:45pm (Mon-Fri) 6am-4:45pm (Sat) 8am-4:45 (Sun-Public Hols) Solid Waste Landfill.

St.lves

Licensed Landfills cont	inued	SOUTH WEST	
Eastern Creek Waste Centre Wallgrove Rd 1300 651 116 7am-4pm (Mon-Fri) 8am-5pm	Eastern Creek	Glenfield Waste Dispo Campbell St 9601 8766 6:30am – 4.20pm (Mon-Sat) Solid Waste Landfill.	osals Glenfield
Solid Waste Landfill.		Jacks Gully Waste Ma	anagement
Elizabeth Drive Landf 1725 Elizabeth Drive	ill Facility Kemps Creek	Centre Richardson Rd	Narellan
<b>02 4774 8866</b> 7am-5pm (Mon-Fri)		1300 651 116 6am-4pm (Mon-Fri) 8am-5pm	
Inert, Hazardous , Industrial a	nd Solid Waste	Solid Waste Landfill.	
Landfill.		Lucas Heights Waste	Management
Enviroguard Cnr Mamre & Erskine Park   9834 3411 6am-4:30pm (Mon-Fri) 7am-3		Centre New Illawarra Rd 1300 651 116 6am-4pm (Mon-Fri) 8am-5pm	Lucas Heights (Sat-Sun)
Solid Waste Landfill.		Solid Waste Landfill.	
Kari & Ghossayn Lot 17-23 Elizabeth Drive 9826 1137	Kemps Creek	SOUTH Kurnell Landfill	
7am-5pm (Mon-Fri) 7am-1pm	(Sat)	Captain Cook Drive	Kurnell
Solid Waste Landfill.		<b>9668 8539</b> 6am-4pm (Mon-Sat)	
Penrith Waste Servic 842 Mulgoa Rd 02 4773 8778	Mulgoa	Inert Waste Landfill.	
6am-4:45pm (Mon-Fri) 7am-3 9am-2:45pm (Sun)	:45 (Sat)		
Solid Waste Landfill.			
Solid Waste Landfill.			

# **Skip Companies With Their Own Sorting Facilities**

Companies need approval to sort, store, transfer, separate or process construction and demolition waste. Larger facilities require a licence from the EPA. For the up-to-date list of licenced facilities and the conditions of the licence visit this website: www.epa.nsw.gov.au/prpoeo Contact the local council for other approved facilities in your area.

CITY & EAST		WEST		
Dial A Dump		Complete Waste & Recycling		
Albert St 9327 7777	St.Peters	19-23 Fariola St 9737 9977	Silverwate	
Reefway		J&M Waste		
3-7 O'Riordan St 9310 5311	Alexandria	13-16 Long St 9725 2363	Smithfield	
INNER WEST		SOUTH WEST		
Aussie Skips		Austwaste		
84-108 Madeline St 9712 5356	South Strathfield	12a Glenfarne Rd 9554 8077	Bexley	
NORTH		Has-A-Bin	•	
Bosscher Bins		35 Wentworth St 9642 1477	Greenacre	
2 Nerang St	Terrey Hills			
9450 1974		SOUTH		
North Shore Skips		Collex		
1300 364 991	St.lves	38 McPherson St	Banksmeadov	
NORTH WEST		9642 6977		
Collex				
127 Burfitt Rd 9642 6977	Schofields			

# Mixed Waste

#### Also see Licenced Landfills.

Some facilities accept mixed waste and either sort it for recycling or compact it and take it to a landfill. Some are cheaper than others as they are geared up to recycle heavy materials like concrete, brick etc. Check to see if they are open to the public or accept hand unloading of vehicles.

NO ASBESTOS is accepted at these facilities.

#### **CITY & EAST**

#### Tip Fast 5a Canal Rd St.Peters 9557 4900

6:30am-5pm (Mon-Fri) 7-3pm (Sat)

Accept mixed building and demolition waste. Sorted for recycling. Call for a quote.

#### NORTH

#### **Artarmon Waste Management** Centre Artarmon

#### Lancelev Place

1300 651 116 1am-5pm (Mon-Fri) 5am-5pm (Sat) 7am-5pm (Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terra-cotta accepted. Also accept metal and whitegoods for recycling (limits apply).

#### **Belrose Waste Management Centre Crozier Rd** Belrose 1300 651 116

6am-5pm (Mon-Fri) 7am-5pm (Sat) 8am-5pm(Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

What's Waste Meatworks Ave **Oxford Falls** 9975 1792 7am-5pm (Mon-Fri) 6am-12 (Sat) Accept mixed building and demolition waste. Sorted for recycling.

#### **NORTH WEST**

**Ryde Waste Management Centre** Wicks Rd Ryde 1300 651 116 5am-5pm (Mon-Fri) 7am-5pm (Sat-Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

#### WEST

#### **Auburn Waste Management Centre** Hill Rd Auburn 1300 651 116

4:30am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

#### Brandown

20 Davis Rd

Lot 9. Elizabeth Drive Kemps Creek 9826 1256 6am-5:45pm (Mon-Fri) 6am-4:45pm (Sat) 8am-4:45pm (Sun-Public Hols)

#### **Davis Road Recycling & Waste Transfer Station**

Wetherill Park

Rosehill

Wetherill Park

Auburn

9609 3377 5 am-4:30pm (Mon-Fri) 8am-3:45pm (Sat) 10am-3:45pm (Sun) 6am-10am (Public Holidays)

Accept mixed waste. Also accept metal and whitegoods for recycling.

#### **Discount Recyclers** 6 Grand Ave

9898 3444 5:30am-5pm (Mon-Fri) 6am-12pm (Sat)

Accept builders waste, concrete, bricks, dirt, asphalt. etc.

#### **Ecocycle** 155 Newton Rd 9757 2999

6:30am-5:30pm (Mon-Fri) 6:30am-2pm (Sat)

Accept mixed asphalt, concrete, brick, bitumen, sand, sandstone, soil, other hardfills, landscape materials, plasterboard, timber and wood waste. Fees apply.

#### Hannas

#### 3 Duck St 9748 4994

5am-8pm (Mon-Fri) 6am-4pm (Sat) 7am-3:30pm (Sun) Extended hours by arrangement

Accept mixed demolition material, concrete, brick. roof tile, tile, clean masonry fill, untreated timber, site clearing/granular fill and soil for recycling. Also accept scrap metal.

#### **Seven Hills Waste Management** Centre

#### Powers Rd 1300 651 116

Seven Hills

6am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

#### SOUTH WEST

#### **Chullora Recycling Park** Muir Rd 1300 651 116

2am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

#### **Greenacre Transfer Station**

#### 75 Anzac St 9707 1709

Greenacre

Chullora

Only closed between 5:30pm-8:30pm (Mon -Fri) Closes 3pm on Saturday and reopens 8:30pm Sunday

Accept mixed waste.

9709 2773

#### **PMT Transfer Station** 81 Gow St

Padstow

6am-5pm (Mon-Fri) 7am-2pm (Sat)

Accept all excavation material, mixed construction and demolition waste subject to inspection. Recycled roadbase, aggregates, fill soil, topsoil, limited building materials available for sale. Tyres, stumps, fibro, carpet, mattresses contaminated soil and liquid wastes not accepted. Reduced charges for separated loads.

SOUTH

9316 6333

38 McPherson St

#### Kurnell Landfill **Captain Cook Drive** 9668 8539

Mixed Waste continued...

**Collex Building Recyclers** 

7am-4:30pm (Mon-Fri) 7am-12:30pm (Sat)

Accept mixed building and demolition waste.

Closes half an hour earlier for hand unloading.

6am-4pm (Mon-Sat)

Sorted for recycling.

Accept mixed demolition material including concrete, masonry, reinforced concrete, roofing, timber and other building materials. Cheaper if separated.

**Port Botany Transfer Station** Military Rd Matraville 9311 0166 3am-5:30pm (Mon-Fri) 5am-12pm (Sat)

Accept mixed waste.

#### **Rockdale Waste Management** Centre Lindsav St Rockdale 1300 651 116 6am-5pm (Mon-Fri) 8am-5pm (Sat-Sun)

Accept mixed waste. No asphalt, bricks, cement, concrete or terracotta accepted. Also accept metal and whitegoods for recycling (limits apply).

# Site Cleaning & Recycling Services

#### Sites R Us 02 4647 5613

Narellan

Banksmeadow

Kurnell

Will attend home construction sites and separate materials so they can be recycled. Provide waste management reports for council.

# Illegal Waste Dumping

To report illegal dumping call the EPA Pollution Line 13 1555 and ask for the RID Squad. Information about illegal waste dumping and protection for landowners from unscrupulous dumpers can be found at this website: www.epa.nsw.gov.au/waste/s143notice.htm

# The Following Yellow Pages Listings May be Useful

This recycling directory is intended as a quick reference quide to assist builders, demolishers and renovators.

Search the Yellow Pages for additional service providers. Try looking under these headings:

Auctioneers General	Rubbish Removers
Asbestos Removal and/or Treatment	Scrap Metal Merchants
Building Materials - Second-hand	Second-hand Dealers
Demolition - Contractors & Equipment	Stone Masons Waste Reduction and Disposal
Recycling Equipment	Equipment
Recycling Services	Waste Reduction & Disposal Services

# **Newspaper Classifieds**

Newspaper classifieds are a good place to find secondhand materials or advertise materials that are too good to throw away. Here are a few places worth looking or advertising in.

Daily TelegraphDaily9288 2000http://classifieds.news.com.au	The LandWeekly02 4570 4444www.theland.com.au		
Have a Building Materials category in the classifieds section.	Deadline for advertising by phone is 3pm Tuesday, by fax is 2pm Tuesday.		
Deadline for advertising is 5pm Friday.	The Trading Post		
Sydney Morning Herald Daily 13 2535	Weekly 13 26 26 www.tradingpost.com.au		
www.market.fairfax.com.au	Comes out Thursdays. Deadline for advertising by		
Have a Building Materials category in the Herald Trader section.	phone is 7pm Tuesday.		
Deadline for advertising is 8pm Thursday.			

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### A to Z Guide

Facility	Phone Number	Suburb/Town	Benedicts	9755 2622	Moorebank
A Charltons Waste Paper Recycling	0414 661 344 9668 9370	Kurnell	Benson Heritage Roof Tile Supplies	02 4578 1037	Londonderry
A1 Drums	9627 3707	Riverstone	Best Buy Appliances	9647-2110	Lidcombe
Aaron Scrap Metal	9557 1617	Marrickville	Better Drums	9627-5575	
Abbey Drums And Pallets	9725 1919	Wetherill Park	Bio-Recycle	02 4577 6610	Vineyard
Abbra Cadabra Waste Oils	9626 7269	Quakers Hill	Booths Office Furniture	9557 5835	Camperdown
ABC Waste Oil Collection	9622 1190	Lalor Park	Boral Plasterboard	9638 0571	Camellia
Able Waste Paper Recycling	g 9522 2221	Miranda	Boral Quarries	1300 723 999	Prospect
Active Tree Services	9450 2977	Ingleside	Boral Recycling	1300 723 999	Prospect
Affordable Pallets	9829 6899	Ingleburn	Bosscher Bins	9450 1974	Terrey Hills
All Metal Industries	9529 4423	Ramsgate	Bourke Brick	9939 1526,	
All Metal Industries	9773 9284	Revesby		0418 241 516	Brookvale
All Steel Merchant & Broke	rs 9838 1533	Riverstone	Bower Re-Use & Repair Centre Co-Operative	9568 6280	Marrickville
Alpine Tree Removals	9651 2444	Dural	Bowing Waste Paper	9306 0260	IVIAITICKVIIIE
Amcor Botany Paper Mill	1800 819 000	Matraville	& Cardboard	9214 6772	Marsfield
Amcor Paper Recycling	9642 8055	Enfield	Brandown	9826 1256	Kemps Creek
Amcor Recycling	9695 3472	Matraville	Brookvale Metal Recyclers	9905 6435	Brookvale
AMR	9792 1366	Milperra	Brookvale Recycled Second		
Andrew O'Sullivan			Hand Building Materials	9451 5566	Oxford Falls
& Associates	0416 284 228		Building Recyclers	9559 1833	St.Peters
Anglo Metal	9557 4487	Alexandria	Burns H E & Sons	9624 8666	Seven Hills
Architectural Heritage	9660 0100	Glebe	Camden Soil Mix	02 4658 1647	Narellan
Artarmon Waste Management Centre	1300 651 116	Artarmon	Campbelltown Recycling Centre	02 4626 5422	Campbelltown
Artistic Popular Furniture	9644 3054	Auburn	Camsons Pty Ltd	9675 6222	St Marys
As Good As Used			Carpet Disposals	9588 6363	Bexley
Building Materials	9673 5398	St.Marys	Carpet Recyclers	9791 9151	Bankstown
Ask The Leighton Brothers	9524 3779, 0410 400 770	Miranda	Chair Clinic	9560 9113	Stanmore
Associated Scrap Metal	9905 2240	Brookvale	Chair Doctor	9299 1800	Sydney
Astron	9729-0500	Smithfield	Chantler's Metal Recyclers		
Auburn Waste	3723 0000	omanicia	(NSW)	9524 8813	Caringbah
Management Centre	1300 651 116	Auburn	Cheltenham Rd Landfill	9744 3777	Croydon
Auscrap	9516 3078	Newtown	Chemsal	9604 7533, 9604 8467	Wetherill Park
Aussie Skips		South Strathfield	Chippendale Restorations	9810 6066	Rozelle
Australian Liquid Recyclers		St Marys	Chromford	9631 6644	Pendle Hill
Australian Metal Cooperativ		Alexandria	Chullora Recycling Park	1300 651 116	Chullora
Australian Native Landscap		Badgerys Creek	Clean Way Solvents	9820 5144	Minto
Australian Solvent Recycler		St Marys	Cleanaway	02 4920 1455	Kooragang
Australian Waste Oil Refine		Seven Hills	Cleanaway Recycling	13 1339	Erskine Park
Austwaste	9554 8077	Bexley	Clearwater Industrial Service	s 9824 3225	Moorebank
Balmain Stripping Factory	9560 3083	Leichhardt	Coast & Valley Oil		
Barca Metals		Chipping Norton		02 4388 5911	Berkeley
Barlea Paper Recycling	0418 113 012	Newport	Collex	9642 6977	Enfield
Barter Town Salvage	9826 1078	Kemps Creek	Collex Building Recyclers	9316 6333	Banksmeadow
Bathurst Demolition Services	02 6332 6096	Bathurst	Complete Office Refurbishment	9540 5510	Taren Point
Belrose Waste Management Centre	1300 651 116	Belrose	Complete Waste & Recycling	9737 9977	Silverwater

Resource NSW – Construction & Demolition Recycling Directory

Concrete Recyclers	9684 6811	Camillia
Cookes Metal Recyclers	9748 1564	Silverwate
Crazy Charlies	9211 4558	Chippendal
Crossroad Drum Co.	9787 3433	Campsie
Cut-Price Glass	9327 8278, 0411 841 842	Double Ba
CWDS	9623-0888	Strathfield
D&P Timber & Bricks	9833 9044, 9867 5132	St.Mary
Daily Telegraph	9288 2000	
Davco's Secondhand Building Materials	02 4628 5677	Campbelltowr
Davis Earth Moving & Quarrying	9450 2288	Ingleside
Davis Road Recycling & Waste Transfer Station	9609 3377	Wetherill Parl
Devine Marine Group	9518 9444	Rozelle Ba
Dial A Dump	9327 7777	St.Peter
Dickson Recycle Industries	9725 1711	Smithfield
Discount Recyclers	9898 3444	Rosehi
DJ Daisley & Sons	9798 7075	Ashfield
Donmar	9755 3305	Lansval
Dravin Building Demolition & Alterations	9807 1363 0414 802 384	Ryde
Drum And Waste Solutions	9725 1044	Wetherill Parl
Drum Distributers	9971 2836	Bankstowr
Drum Reconditioners (NSW	) 9624 6455	Seven Hill
Eastern Creek Waste Management Centre	1300 651 116	Eastern Creel
Ecocycle	9757 2999	Wetherill Parl
Ecocycle	9757 2999	Wetherill Parl
Elizabeth Drive Landfill Facility	02 4774 8866	Kemps Creel
Enmore Box & Case	9560 2866	Marrickville
Envirogreen	02 4729 0136	Castlereag
Enviroguard	9834 3411	Erskine Park Ro
Environmental Waste Managers	02 4932 4466	Rutherford
EPA Pollution Line	13 1555	
ERS Australia	9832 8766	Glendenning
Former Glory	9662 6008, 9666 3103	Botan
Foundry Metals Pty Ltd	9892 3788	Guildford
Gem Plastics International Pty Ltd	9833 3255	St.Mary
George Campbell & Co	9519 6821	St Peter
Ghama Electrics	9796 7299	Punchbow
Glenfield Waste Disposals	9601 8766	Glenfield
Greenacre Transfer Station	9707 1709	Greenacre
Greenwoods	0408 444 456, 0418 444 456	St.Ive
Hallinan's Recycling Centre	9833 0883	St.Mary
Hallinan's Recycling Centre	02 4572 5922	Windso

nillia	Hannas		9748	4994	Auburn
ater	Has-A-Bin		9642	1477	Greenacre
dale	Hassle Street, Road Materia				
psie	Recycling Centre		9609	7928	Fairfield
_	Hawkesbury City Waste Management Facility	02	4572	5489	South Windsor
Bay	Hitechnology Metal Recycle		9585		Hurstville
field	Holt Land Rehabilitation Cer				Kurnell
arys	Hornsby Scrap Metal	iu e	9477		Hornsby
urys	Industrial Solvents		9772		Revesby
	Ironwood Recycled Timbers		9818		Rozelle
own	J&D Blue Wastepaper		9668		Kurnell
	J&D Dide Wastepaper		9725		Smithfield
side	J&M Waste		9725		Smithfield
	Jacks Gully Waste		9723	2303	Simumeta
Park	Management Centre	13	00 65	1 1 1 6	Narellan
Bay	Jacobson Metaland		9748	2487	Silverwater
ters	Jarmax		9772	1197	Padstow
field	Jay & Kay Glass		9632	8588	Smithfield
ehill	JM Joseph		9638	1683	Rydalmere
field	Jones Waste Service		9774	4850	Revesby
vale	Junkyard	02	4572	5211	Londonderry
lyde	Kari & Ghossayn		9826	1137	Kemps Creek
Park	Kauri'd Away		9970 !	5522,	
own	,	04	02 70	5 47Ó	Narrabeen
Hills	Kimbriki Recycling &		0.400	0510	
1115	Waste Disposal Centre	~~~	9486		Terrey Hills
reek	Klekies		4324-		Gosford
Park	Knight's Syndicate		9629 ! 9629		Rouse Hill
Park	Kurnell Landfill			8539	Kurnell
	Landscape Rescue	04	16 28		Tamarama
reek	Lidcombe Liquid Waste Plar				Homebush Bay
ville	Liverpool City Recyclers		9602		Moorebank
agh	Lucas Heights Waste		0002	.000	moorobann
Rd	Management Centre	13	00 65	1 1 1 6	Lucas Heights
ford	M.L. Friend's Earthworks	04	38 39	3 003	0409 393 003
ioru	Macquarie Drum Services	02	4575	2254	Wilberforce
aina	MAG Foamwax		9649	6248	Lidcombe
ning	Mason Transport		Cont	act Bo	oral Plasterboard
tany	Metal Salvage Industries		9790	7466	Botany
ford	Metalcorp Recyclers		9666	4157	Botany
	Metalcorp Recyclers		9755	3000	Chipping Norton
arys	Metalcorp Recyclers		9820	3509	Minto
ters	Metalcorp Recyclers		9756	2635	Wetherill Park
lwoc	Metropolitan Demolitions				
field	& Recycling (Aggregates)		9519	3099	St.Peters
acre	Metropolitan Demolitions				
,	& Recycling (Building Materials)		9519	3283	St.Peters
lves	Metropolitan Recycling			3500	Liverpool
arys	Mini-Cost Office Furniture			2299	Auburn
dsor					

Resource NSW – Construction & Demolition Recycling Directory

MIC Museul Waste Daway	0410 000 054	Manadan Dark		00 4701 0017	Penrith
MK Muscat Waste Paper	0419 602 354	Marsden Park	Sam's Seconds	02 4731 3317	
Moatoga Paper Recycling	9708 5962	Condell Park	Sanalco Pacific	9725 6699	Villawood
MRI Narallan Austiana	9729 4999	Smithfield Narellan	Santa Maria Tiles	9399 6368	Randwick
Narellan Auctions Nationwide Oil	02 4646 1961 9604 2611	Wetherill Park	Second Hand Building Cent	re 9567 1322 9621 2633	Rockdale
	9604 2611 9748 0611		Sell & Parker Sell & Parker		Blacktown
Norman's Scrap Metal		Auburn Penrith		9319 2633	Waterloo
Norman's Scrap Metal	02 4732 1683	Pennun	Seven Hills Waste Management Centre	1300 651 116	Seven Hills
North Shore Scrap Metal Recyclers	9955 3337	Crows Nest	Simsmetal	9669 6477	Mascot
North Shore Skips	1300 364 991	St.Ives	Simsmetal	9771 6711	Milperra
Obsolete Tiles	9684 6333	Rydalmere	Simsmetal	9623 0391	St Marys
Oil Collection Services	0413 742 752	Homebush	Simsmetal	9604 4000	Wetherill Park
O'Leary Electrical	9712 5499	Five Dock	Simsmetal - Plastic Unit	9792 3370	Revesby
Pallets Plus	9833 2926	St.Marys	Sita Environmental Services		Wetherill Park
Paper-Go-Round	9550 4784	Newtown	Sites R Us	02 4647 5613	Narellan
Parramatta Scrap Metal		Nth Parramatta	Smithfield Pallet Repairs	9604 5900	Smithfield
Penrith Waste Services	02 4773 8778	Mulgoa	Southern Cross Metals	9645 1444	Sefton
Pile & Bucket	9328 4477	Double Bay	Southern Glass	0418 219 200	Dural
Pilkington (Australia) Ltd	9550 2911	Alexandria	Sydney Carpet Removals	9824 3133	Moorebank
Pioneer Waste Managemen		Taren Point	Sydney Morning Herald	13 2535	
Plastic Recycling Services	9838 1230	Riverstone	Sydney Secondhand	9905 7151,	
PMT Transfer Station	9709 2773	Padstow	Sandstone Company	0408 259 155	Oxford Falls
Port Botany Transfer Statior	9311 0166	Matraville	Sydney Water	1800 814 719	
Progressive Recycling	9821 3500	Liverpool	Tank Management Services	9632 0594	Guildford
Quality Recycled	9542 7203,		Terrace House Factory		
Demolitions	0418 249 858	Caringbah	Building Materials	9660 6768	Ultimo
Recon Appliances	9568 2446	Petersham	The Battlers Friend	9516-3161	Stanmore
Recycled Building Material	9627 2872	Vineyard	The Brick Pit	9888 7888	North Ryde
Recycled Resources	9787 2209	Campsie	The Home Recycling Centre		Lidcombe
Recycled Resources	9748 3566	Silverwater	The Land	02 4570 4444	
Recycling Works	9517 2711	Annandale	The Trading Post	13 26 26	
Reefway	9310 5311	Alexandria	Thunderbird Construction & Procurement	9571 8299	Rozelle Bay
Resource NSW	8837 6000	Parramatta	Tip Fast	9557 4900	St.Peters
Resource Recycling			Tradeaplant	9904 4000	01.1 01013
Technology	9618 5655	Ingleburn	www.tradeaplant.com.au	5504 4000	
Reverse Garbage	9569 3132	Marrickville	Tully's Restorations		
RID Squad	13 1555		& Building Salvage	9412 1333	Artarmon
Riverside Metal Industries	9771 1122	Revesby	Tyrecycle	9834 6111	Erskine Park
Riverside Second Hand Building Supplies	9755 3984	Chipping Norton	Universal Metal Recyclers	9769 0999	Girraween
Riverstone Waste Facility	9627 3300	Schofields	Visy Recycling - Glass Divisi	on 93164343	Botany
Rockdale Waste	5027 5500	ochonicido	Visyboard	1300 368 479	Smithfield
Management Centre	1300 651 116	Rockdale	Waste Management Centres		Artarmon,
Roof Tile Recyclers	9756 3350	Wetherill Park	Auburn, Belrose, Chu Lucas Heights, Nor		
Rozelle Recycled			Western District Scrap Meta		Blacktown
Building Centre	9818 1166	Rozelle	What's Waste	9975 1792	Oxford Falls
Rubber Recycling Pty Ltd	9724 6511	Lansvale	What's Waste	9975 1792	Oxford Falls
Ryde Waste	1200 051 110	D: I	William Kelso	0414 900 353	entera i allo
Management Centre	1300 651 116	Ryde	Worth Recycling	8558 5100	Sans Souci
Saint Vincent De Paul	9560 8666	All suburbs	Zubo	9416 5053	Lindfield
Salvation Army	13 1640	All suburbs	2000	2410 2022	Lindheid
			1		

# **NOTES**

# NOTES

# **RESOURCE**<sup>§</sup>

To achieve a cleaner and more sustainable world, it is vital that commerce, government and the community work together to reduce waste. Resource NSW works across the State to encourage,

facilitate and manage the process to achieve this aim.

To apply to have your facility listed in this directory, change your details, suggest improvements or request more copies, please contact:

C&D Project Team Resource NSW PO Box 644 Parramatta NSW 2124 Ph: 8837 6000 Fax: 8837 6099 Email: head.office@resource.nsw.gov.au www.resource.nsw.gov.au

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## APPROXIMATE COMPOSITION OF SYDNEY DEMOLITION/REFURBISHMENT MATERIALS

Type of material	Older residential dwelling (%)	New residential dwelling (%)	Multi-storey office demolition (%)	Office internal refurbishment (%)
Bricks and concrete/mortar	44	68	75	5
Internal walls/ceilings	2	8	7	55
Fittings: bathroom, kitchen, lights	2	2	2	5
Floor coverings: carpets, tiles	2	2	2	15
Metals/plastics/glass	5	2	12	15
Timber	35	10	2	5
Roof tiles	10	8	-	-
TOTAL	100	100	100	100

#### (Source: Reddrop 1996)

Note: The services of a quantity surveyor would be useful for larger projects. However, for the demolition of a dwelling house, the following data is provided as a rough guide. Demolition of a modest timber framed house will typically produce approximately 60 tonnes of materials, while a double brick house will produce approximately 120 tonnes of materials (Kinhill Engineers, 1991, p.22-23). To convert tonnes into volume (m<sup>3</sup>):

0.5 tonne = 1 $m_1^3$
2.4 tonne = 1 m <sup>3</sup>
1 tonne = 1 m <sup>3</sup>
0.75 tonne = 1 $m^3$
2 - 4 tonne = 1 m <sup>3</sup>

(Source: Inner Sydney Waste Board 1998)

**Example:** An old, double brick house is to be demolished. The amount of waste materials likely to be generated is as follows:

Total Waste Materials	= 120 tonnes
Timber	= 35% x 120 tonnes = 42 tonnes of timber $\therefore$ 42 tonnes of timber $\div$ 0.5 = <b>84m<sup>3</sup> of timber</b>
Bricks and Concrete	= 44% x 120 tonnes = 52.8 tonnes of bricks and concrete
	= Say 25% x 52.8 tonnes is concrete = 13.2 tonnes of concrete $\therefore$ 13.2 tonnes of concrete $\div$ 2.4 = <b>5.5m<sup>3</sup> of concrete</b>
	= Say 75% x 52.8 tonnes are bricks = 39.6 tonnes of bricks ∴39.6 tonnes of bricks ÷ 1 = <b>39.6m<sup>3</sup> of bricks</b>
Tiles	= 10% x 120 tonnes = 12 tonnes $\therefore$ 12 tonnes of tiles $\div$ 0.75 = <b>16m<sup>3</sup> of tiles</b>
Steel	= 5% x 120 tonnes = 6 tonnes
	<ul> <li>= Say 25% x 6 tonnes is steel = 1.5 tonnes of steel</li> <li>∴ 1.5 tonnes of steel ÷ 2 = 0.75m<sup>3</sup> of steel</li> </ul>

# PROCEDURES FOR THE REMOVAL AND DISPOSAL OF ASBESTOS FROM BUILDINGS

#### 1. A Brief History

Inhalation of asbestos fibres is known to cause the chronic disease "Asbestosis". Inhalation may also cause lung cancer and mesothelioma which can be fatal. A number of products used in the building and construction industry in Australia have been made from asbestos-cement. These products include flat corrugated or compressed asbestos-cement sheeting (fibro), fibro pipes (eg. water, drainage and flue pipes), roofing shingles, guttering and flexible building boards (eg. Villaboard, Hardiflex, Wundaboard, Flexiboard).

New fibrous-cement products no longer contain asbestos. However, prior to 1970 crocidolite (blue asbestos) was used in many building products including all those mentioned above. Asbestos was used in some asbestos-cement products up until 1986.

If these products are maintained in good order, <u>they present no health risk</u>. However, precautions must be observed during structural alteration or demolition involving asbestos-cement materials.

#### 2. General Precautions

It is illegal to abrasive blast asbestos-cement products. For example, never water blast asbestoscement roofing at high pressure in preparation for painting or waterproofing.

In general, work procedures should be designed to minimise dust and where possible, action should be taken to avoid the spread of any asbestos dust contamination. In particular, the following practices should be adopted:

- 2.1 Use non-powered hand tools such as handsaws, as these generate a smaller quantity of predominantly coarser dust or waste chips.
- 2.2 Wet down the material to reduce the release of dust when cutting. High pressure water jets must not be used.
- 2.3 Work with asbestos cement products in well ventilated areas and where possible, in open air.
- 2.4 Good work hygiene principles should be observed. This may entail the use of plastic drop sheets to collect off-cuts and course dust or the use of approved vacuum cleaning equipment. Where it is necessary to sweep floors, the area involved should be wetted to suppress dust.
- 2.5 All off-cuts and collected dust should be disposed of as asbestos waste in labelled plastic bags.
- 2.6 Approved respiratory protection should be used when appropriate, particularly in confined spaces.

#### 3. Removal of Asbestos-Cement Sheeting

When removing asbestos-cement roofing, wall sheeting or other fibro products from buildings or other structures:

3.1 All windows and doors on the building should be closed. In factory-type buildings where there is no ceiling, the work area should be roped off.

- 3.2 The asbestos-cement sheets should be sealed or wetted with water (but not high pressure water jets). The sheets should not be wetted if this creates a risk of a worker slipping from a roof.
- 3.3 Workers should wear overalls and either approved disposable respirator or an approved halfface respirator mask fitted with dust cartridges approved for asbestos. On completion of works involving asbestos, all clothing worn by workers should be placed in plastic bags and laundered separate from all other clothes.
- 3.4 Power tools must not be used for asbestos work unless they have effective dust control devices.
- 3.5 Asbestos-cement sheets should not be removed with minimal breakage and should be lowered to the ground, not dropped.
- 3.6 The removed sheets should be stacked on a ground sheet and not allowed to lie about the site where there may be further broken down or crushed by machinery or site traffic.
- 3.7 All asbestos-containing waste should be kept wet, wrapped in two layers of PVC plastic (minimum thickness 200 microns) and removed from the site as soon as practicable, using covered bins or on a covered truck.
- 3.8 Any asbestos-cement residues remaining in the roof space or around the removal area should be cleaned up, using an approved vacuum cleaner if necessary.

#### 4. Disposal of Asbestos-Cement Sheeting

Asbestos waste will only be accepted at depots approved by Waste Service NSW – Phone: 9934 7022. Waste Services (State Government) transfer stations and landfills include:

#### WASTE MANAGEMENT CENTRES - TRANSFER STATIONS

	ARTARMON	AUBURN	CHULLORA*	ROCKDALE	RYDE	SEVEN HILLS
Address	Lanceley Place Artarmon	Hill Road Auburn	Muir Road Chullora	Lindsay Street Rockdale	Wicks Road North Ryde	Powers Road Seven Hills
Phone	9439 8521	9648 5316	9793 8416	9597 4506	9888 9381	9674 5300
Householder	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Yes	Yes	Yes	Yes	Yes	Yes
Mon - Fri Sat-Sun	1am to 5pm 7am to 5pm	6am to 5pm 8am to 5pm	6am to 5pm 8am to 5pm	6am to 5pm 8am to 5pm	5am to 5pm 7am to 5pm	6am to 4pm 8am to 5pm

ALL WASTE MANAGEMENT CENTRES ARE CLOSED ON GOOD FRIDAY AND CHRISTMAS DAY.

#### WASTE MANAGEMENT CENTRES - LANDFILLS

	BELROSE TRANSFER STATION	BELROSE LANDFILL	EASTERN CREEK LANDFILL	JACKS GULLY LANDFILL	LUCAS HEIGHTS LANDFILL
Address	Crozier Road	Crozier Road	Wallgrove Road	Richardson Road	New Illawarra
	Belrose	Belrose	Eastern Creek	Narellan	Road
					Lucas Heights
Phone	9450 1306	9450 1306	9675 1060	046 581 497	9543 1544
Householder	Yes	Yes	Yes	Yes	Yes
Commercial	Yes	Yes	No	Yes	Yes
Mon-Fri	6am to 5pm	6am to 2pm	7am to 4pm	6am to 4pm	6am to 4pm
Sat-Sun	8am to 5pm	8am to 11am	8am to 5pm	8am to 5pm	8am to 5pm

#### ALL WASTE MANAGEMENT CENTRES ARE CLOSED ON GOOD FRIDAY AND CHRISTMAS DAY.

You should telephone the transfer station or landfill at least one (1) day ahead for current advice and charges. The above phone numbers are correct at the time of publication.

Appendix A2.02

The intention of this brochure has been to alert builders and home owners of the need to properly dispose of asbestos.

While it is believed that the information (which is given in the interests of public health) is correct, Council can accept no liability of any injury or condition associated to persons in the removal of asbestos.

> HORNSBY SHIRE COUNCIL 296 Pacific Highway, Hornsby

> > Postal Address: PO Box 37 HORNSBY NSW 1630

> > > DX 9655

Telephone: 9847 6666 Fax: 9847 6996

### CONTROL OF PLACEMENT OF WASTE CONTAINERS IN A PUBLIC PLACE

#### HORNSBY SHIRE COUNCIL

POLICY NO: ESEEC 5

POLICY TITLE: CONTROL OF PLACEMENT OF WASTE CONTAINERS AND WASTE TRAILERS AND/OR BUILDING MATERIALS ON FOOTWAYS, NATURE STRIPS AND ROAD SHOULDERS.

MAJOR PROGRAMME: Environmental Education and Compliance

PROGRAMME MANAGER: Manager, Environmental Education and Compliance - Louise Gee

**RELEVANT LEGISLATION:** 

FILE REFERENCE NO: REVIEW DATE:

#### POLICY OBJECTIVE/S

1. To control and regulate the placement of waste containers, waste trailers and/or building materials on footways, nature strips, road shoulders and other public places.

#### POLICY PROTOCOL

1. <u>Waste Containers or Waste Trailers and/or Building Materials - Not to be Placed or Stored on</u> <u>Public Place</u>

Council will not permit the storage of waste containers or waste trailers and/or building materials on a footway, nature strip, mall or road shoulder where waste containers or waste trailers and/or building materials can be located on private property.

2. <u>Waste Containers</u>, <u>Waste Trailers and/or Building Materials - Storage on Public Place in</u> <u>Special Circumstances</u>.

An owner or occupier of land, builder, or building applicant who deems that the placement of a waste container or waste trailer and/or building materials on a public footway, nature strip, mall or road shoulder is ABSOLUTELY NECESSARY for the reception of wastes, debris, building wastes and the like or building material and considers that the placement of the waste containers or waste trailer and/or building materials on private property from which the wastes, debris and building wastes will arise is not possible due to lack of space on the premises, he/she may lodge a written application with the Council. Such application shall be accompanied by the appropriate fee. Applications shall be lodged on Council's form provided for this purpose.

3. <u>Storage of Waste Containers, Waste Trailers and/or Building Materials on Footway, Road</u> <u>Shoulders etc Subject of an Application - Not Necessarily Approved.</u>

Council shall consider an application lodged in accordance with Clause 2 on the merits of the particular case and nothing in this section shall be construed that Council will approve and

issue a permit based on the submission of an application. Council may issue a permit, with or without conditions to be complied with, or may refuse to issue a permit if the circumstances of the case do not warrant the placement of the waste container, waste trailer and/or building materials on the footway, mall or road shoulder or such placement may endanger the safety of pedestrians or create a hazard to vehicular traffic.

#### 4. <u>Insurance Cover</u>

An applicant for a permit shall provide, with the application, a certified copy of a current Public Risk and Property Damage Insurance Policy having a minimum cover of \$5 million with Council's name adjoined to such policy clearly indicating that Council is indemnified against any claims arising from the placement of any waste container, waste trailer and/or building materials in connection with the property on public areas. The particulars of the site and the footway, nature strip, mall or road shoulder adjoining the site shall be clearly specified on that policy.

That insurance cover shall be maintained in full for the duration of the period that the container is in place.

#### 5. <u>Placement of Container, Waste Trailer and/or Building Materials Not Before Permit.</u>

No waste container, waste trailer and/or building materials shall be placed on the footway, nature strip, mall or road shoulder until a permit has been obtained therefore beforehand.

6. <u>Definitions</u>

"Waste Container, Building Waste Container (or builder skip)" - means a container that is designed:-

- 6.1. to be used and re-used for the temporary storage and subsequent conveyance and disposal of builders' rubble, waste, tree loppings, household or other rubbish or earth (but not for the storage of putrescible or dangerous waste); and
- 6.2. to be removed from, returned to and carried by a vehicle that, when carrying the container, may lawfully be used on a public road.

"Waste Trailer" - means a registered vehicular trailer designed to contain and transport wastes.

"Public Place" - any street, road, land, thoroughfare, footpath, nature strip, or place open to or used by the public, and includes any place at the time open to or used by the public on the payment of money or otherwise.

"Rear Panel of Waste Container" - that panel which faces oncoming traffic behind the container.

#### 7. <u>Acceptable Dimensions of Waste Containers</u>

Acceptable dimensions for waste containers to be placed on road shoulders or footpaths, footways, nature strips or malls are as follows:-

#### **Dimensions (in metres)**

Location	<u>Length</u>	<u>Width</u>	<u>Height</u>
On road shoulders	3.0-5.4	1.5-2.5	1.0-2.0
On footpaths, nature strips or malls	2.0-5.4	1.5-2.5	1.0-2.0

8. <u>Visibility Requirements for Waste Containers or Waste Trailers on Public Places - Marking</u> Plates, Reflectors, Warning Lights, Colour of Container

Where Council has approved the placement of a waste container or waste trailer on a road shoulder, footway or mall, the waste container shall comply with the following requirements to facilitate the visibility factors:-

- 8.1. Two rear marking plates, complying with the requirements which apply to heavy vehicles and trailers described in Paragraph 56A of Schedule F of the Motor Traffic Regulations shall be fitted to the rear panel of the waste container or waste trailer. Such plates shall be fitted as high as possible, one on each site of the rear panel, to give approaching vehicles the earliest possible warning of a container's or trailer's presence on the road or footpath.
- 8.2. The waste container or waste trailer shall be placed in such a position to ensure that marking plates are visible to oncoming traffic.
- 8.3. Reflectorised tape shall be fixed and displayed on side panels and rear edges of the waste containers or waste trailers. Such reflectorised tape shall be at least 15cm wide and extend the full height of the sections indicated.
- 8.4. Waste containers or waste trailers shall be of bright colours (e.g., yellow, orange or white) to enable them to be easily discernible particularly during hours of darkness.
- 8.5. The name, address and phone number of the owner/supplier of the waste container shall be clearly and permanently marked on the container.
- 8.6. Waste containers or waste trailers shall be in good condition and in a clean condition prior to placement.

#### 9. Use of Waste Containers

The Applicant and user of the waste container or waste trailer to whom a permit for the placement on a public place has been issued shall comply with the following requirements:-

- 9.1. The waste container or waste trailer shall be removed from the public place at the first available opportunity. Should a space on the building site become available to accommodate the waste container or waste trailer the applicant/user shall make immediate arrangements and have the container relocated to that space.
- 9.2. All waste stored in the waste container or waste trailer shall not protrude beyond the panels of the container.
- 9.3. All waste containers or waste trailers shall be adequately covered to prevent spillage of contents or litter or debris being windblown from the container.

- 9.4. No pollutive, hazardous, volatile, or explosive materials shall be placed in the container.
- 9.5. Any spillages of debris or waste materials around the container or trailer shall be immediately swept up and placed in the container.
- 9.6. No liquid waste shall be placed in the container.

#### 10. <u>Recovery of Council's Costs</u>

- 10.1 Council has the right to order the immediate removal of any waste container, building materials or waste trailer which, due to its location, use, or any other factor, creates a danger, nuisance, or hazard to pedestrian traffic, vehicular traffic or residents of the neighbourhood. Should the applicant, user or permit holder fail to comply with that direction, Council may exercise its powers and arrange for the removal of the container or trailer and/or building materials disposal of the contents, and the storage of the container or trailer and may recover the costs incurred in a Court of competent jurisdiction.
- 10.2 Council has the right to require the clean up of the surrounds of a container or trailer which, due to the use or misuse of the container by the applicant, user, permit holder or any other person, creates a danger, nuisance and hazard and should the applicant or user fail to comply with that direction, Council may arrange for that clean-up of the surrounds and may recover the costs incurred in a Court of competent jurisdiction.
- 10.3 The permit holder, builder or owner shall be responsible for any costs involved in repairing any damage to any road, road shoulder, kerb and gutter, footway, street furniture or tree which occurs as a result of the placement or use of the container, trailer and/or building materials, Council may repair such damage should the permit holder default and may recover the costs of repairs in a Court of competent jurisdiction.

#### DATE OF ADOPTION/AMENDMENT:

10 December, 1997 (Report No ST71/97)

ASSOCIATED CODES:

## ECOLOGICAL SUSTAINABILITY OF BUILDING MATERIALS

The following table contain a summary of the ecological sustainability of building materials commonly used in construction. It provides life cycle analysis of the materials and is a useful tool in choosing the materials in a building so as to minimise waste in the long term.

This table has been prepared by analysing different environmental criteria, summed up as "resource depletion" inherent pollution and embodied energy" and presenting in one word assessments from poor to excellent - against seven desirable environmental qualities developed by Bill Lawson and TAFE NSW (Lawson, 1996) (TAFE, 1997). For a more detailed analysis refer to Bill Lawson's' publication "Building Materials Energy and the Environment: towards ecologically sustainable development" or the Building Material Ecological Sustainability INDEX: A numerical method for assessing the environmental impact of building materials produced by Partridge Partners Pty Ltd.

The assessment of the environmental sustainability of building materials listed does not consider other environmental aspects such as insulation, thermal gain, re-radiation and other performance related aspects. Council's Energy Efficient Housing Policy requires a thermal assessment of the design of a building and building materials to be undertaken. Where any inconsistency exists Council's Energy Efficient Housing Policy should prevail.

N.B. The one word assessments range of the seven environmental factors which determine the ecological sustainability of building materials is provided as follows: poor, fair, good, very good, excellent. Where the environmental factors have a good or better rating for the majority of environmental factors, the building material is considered to have a good ecological sustainability for the purposes of assessment.

Where there is no rating given to a building material for a particular category of environmental assessment, there is no data available.

Where a N/A rating is given to a building product for a particular category of environmental assessment (i.e. asbestos) it means that this product is no longer used as a construction material. Any materials found within existing buildings which are being demolished should be disposed of in accordance with Council's Code "Procedures for the Removal of Asbestos from Buildings".

# ECOLOGICAL SUSTAINABILITY OF BUILDING MATERIALS

Environmental Factors	Raw Material Availability	Minimal Environmental Impact	Embodied Energy Efficiency	Product Lifespan	Freedom from Maintenance	Potential for Product Reuse	Material Recyclability
	Fair	Poor	Fair	Excellent	Mary Cand	Very Good	Excellent
Aggregates (i.e. crushed rock, gravel and sand	Fall	1001	Fail	Excellent	Very Good	Very Good	Excellent
Aluminium	Very Good	Poor	Poor	Excellent	Very Good	Fair	Excellent
Asbestos	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asphalt & Bitumen Products	Fair	Fair		Fair to Good	Fair	Poor	Poor to Good
Autoclaved Aerated Concrete (AAC)	Good	Good	Very Good	Excellent	Excellent	Poor	Good
Carpet & Underlay (Wood)	Good	Good	Very Good	Excellent	Excellent	Poor	Good
Carpet & Underlay (Plant fibres)	Fair	Good	Excellent	Good	Poor	Fair	Good
Carpet & Underlay (Mixed Fibres)	Good	Good	Very Good	Very Good	Good	Good	Fair
Cement	Good	Poor	Good	Poor	Very Good	Poor	Poor
Concrete & Concrete Products	Good	Good	Very Good	Excellent	Excellent	Poor	Very Good
Clay Bricks, Pavers & Files Kiln-Fired Clay	Very Good	Good	Very Good	Excellent	Excellent	Fair	Good
Ceramics & Tiles	Good	Fair	Good	Excellent	Excellent	Fair	Poor
Flooring Products (Vinyl)	Good	Poor	Fair	Very Good	Good	Poor	Poor
Flooring Products (Linoleum)	Very Good	Excellent	Very Good	Excellent	Very Good	Poor	Fair

Appendix A3.01

Environmental Factors Materials	Raw Material Availability	Minimal Environmental Impact	Embodied Energy Efficiency	Product Lifespan	Freedom from Maintenance	Potential for Product Reuse	Material Recyclability
	Very Good	Excellent	Excellent	Good	Fair	Poor	Fair
Flooring Products (Cork)							
Flooring Products (Rubber)	Very Good	Poor	Good	Very Good	Very Good	Poor	Poor
Flooring Products (Wood)	Excellent	Good	Very Good	Very Good	Good	Good	Fair
Glass & Glazing	Good	Good	Good	Excellent	Very Good	Good	Very Good
Insulation Products (Fibreglass)	Good	Fair	Fair	Very Good	Excellent	Poor	Poor
Insulation Products (Rockwool)	Very Good	Good	Good	Excellent	Excellent	Fair	Poor
Insulation Products (Cellulose)	Very Good	Excellent	Very Good	Good	Very Good	Poor	Poor
Insulation Products (Foams)	Fair	Poor	Good	Very Good	Very Good	Poor	Fair
Insulation Products (Wood)	Very Good	Excellent	Excellent	Very Good	Excellent	Fair	Poor
Insulation Products (Foil)	Very Good	Fair	Good	Very Good	Excellent	Fair	Poor
Lead, Zinc & Copper	Fair	Poor	Very Good	Excellent	Excellent	Poor	Good
Paints & Stains (Oil based)	Good	Poor		Good	Fair	Poor	Poor
Paints & Stains (Water Based)	Very Good	Fair		Very Good	Good	Poor	Fair
Paints & Stairs (Polyurethane's)	Good	Poor		Very Good	Very Good	Poor	Poor
Paints and Stains (Natural)	Very Good	Very Good		Fair	Fair	Fair	Fair
Paper & Cardboard	Very Good	Good	Good	Fair	Fair	Very Good	Very Good
Plasterboard	Very Good	Fair	Very Good	Good	Fair	Poor	Good
Plastics	Good	Poor	Good	Very Good	Fair	Poor	Good
Soils & Fill	Very Good	Excellent	Excellent	Excellent	Good	Very Good	Excellent
Steel	Very Good	Fair	Fair	Very Good	Fair	Fair	Excellent
Stones for Building	Good	Fair	Good	Very Good	Very Good	Very Good	Good

Appendix A3.01

Environmental Factors Materials	Raw Material Availability	Minimal Environmental Impact	Embodied Energy Efficiency	Product Lifespan	Freedom from Maintenance	Potential for Product Reuse	Material Recyclability
Timber (Softwoods)	Very Good	Very Good	Very Good	Good	Fair	Fair	Poor
Timber (Hardwoods)	Fair	Fair	Excellent	Very Good	Good	Very Good	Poor
Timber (Engineered Products)	Very Good	Very Good	Fair	Good	Fair	Poor	Good
Timber (Laminated Veneer Lumber)	Very Good	Very Good	Very Good	Very Good	Good	Very Good	Poor
Timber (Glulam)	Very Good	Very Good	Very Good	Very Good	Good	Very Good	Fair
Timber (Plywood)	Very Good	Very Good	Good	Very Good	Good	Good	Poor
Timber (MDG)	Excellent	Very Good	Good	Good	Good	Good	Fair
Timber (Pineboard)	Excellent	Very Good	Good	Good	Good	Poor	Very Good
Water & Waste	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent

Source: Construction and Transport Educational Services Consortium of the Western Sydney Institute of TAFE, TAFE NSW (1997) Minimising Construction and Demolition Waste - A learning Resource Package for Industry, Training and Vocational Education.

## ESTIMATES OF WASTE MATERIALS IN THE CONSTRUCTION OF A DWELLING

Type of material	Constitution of Waste Materials by Weight(%)
Metal	1.1
Glass	-
Concrete	5.3
Bricks	52.4
Roof Tiles	23.5
Paper/Cardboard	0.4
Plastics	-
Timber	4.5
A/C Sheet	1.5
Plasterboard	8.7
Interior Tiles	2.2
TOTAL	99.6

(Source: Reddrop, Ryan and Walker, 1997)

Note: The services of a quantity surveyor would be useful for larger projects. However, for the construction of a dwelling house, the following data is provided as a rough guide. The construction of a dwelling house results in approximately 13.3kg (or 0.0133 tonnes) of construction waste (excluding soil) for every  $m^2$  of floor area (Reddrop, Ryan and Walker, 1997). The amount of excavated material (i.e. soil) picked up at final site clearing can range from 6 to 20 tonnes. On average about 10 tonnes of waste is sent from each building site to landfill. (Reddrop, Ryan and Walker, 1997). To convert tonnes into volume ( $m^3$ ):

Timber Concrete Bricks Tiles	0.5 tonne = 1 m <sup>3</sup> 2.4 tonne = 1 m <sup>3</sup> 1 tonne = 1 m <sup>3</sup> 0.75 tonne = 1 m <sup>3</sup>
Tiles	
Steel	2 - 4 tonne = 1 m <sup>3</sup>

(Source: Inner Sydney Waste Board 1998)

**Example:** A brick veneer dwelling having a floor area of 200m<sup>2</sup> is to be constructed. The amount of construction waste materials likely to be generated is as follows:

Total Excavation Material	= 10 tonnes of excavation material
Total Building Waste Materials	= 200 x 0.0133 tonnes = 2.66 tonnes
Timber	= 4.5% x 2.66 tonnes = 0.1197 tonnes of timber ∴ 0.1197 tonnes of timber ÷ 0.5 = <b>0.2394m<sup>3</sup> of timber</b>
Concrete	= 5.3% x 2.66 tonnes = 0.14098 tonnes of concrete $\therefore$ 0.14098 tonnes of concrete $\div$ 2.4 = 0.05874m <sup>3</sup> of concrete
Bricks	= 52.4% x 2.66 tonnes = 1.39384 tonnes of bricks ∴ 1.39384 tonnes of bricks ÷ 1 = <b>1.39384m<sup>3</sup> of bricks</b>
Tiles	= 23.5% x 2.66 tonnes = 0.6251 tonnes of tiles ∴ 0.6251 tonnes of tiles ÷ 0.75 = <b>0.46883m³ of tiles</b>
Steel	= 1.1% x 2.66 tonnes = 0.02926 tonnes of steel ∴ 0.02926 tonnes of steel ÷ 2 = <b>0. 01463m<sup>3</sup> of steel</b>

## WASTE STORAGE CONTAINER SIZES & SHAPES

#### Including recycling allocation per unit

Container style 55 ltr	Height overall in mm	Depth overall in mm	Width overall in mm	Approximate weight in KGS 5.0 kgs	Approximate volume in litres 55 ltr	Manufactured from/Materials Plastic/Steel
MGB 120	925 mm	553 mm	490 mm	11.3 kgs	120 ltr	Plastic
MGB 140	929 mm	608 mm	560 mm	11.4 kgs	140 ltr	Plastic
MGB 240	1080 mm	715 mm	580 mm	16.0 kgs	240 ltr	Plastic
MGB 660	1320 mm	550 mm	1360 mm	50.0 kgs	660 ltr	Plastic
MGB 1100	1465 mm	1220 mm	1360 mm	65.0 kgs	1200 ltr	Plastic
MGB 1500	1400 mm	1250 mm	2000 mm	250.0 kgs	1500 ltr	Steel
MGB 3000	1400 mm	2200 mm	2000 mm	350.0 kgs	3000 ltr	Steel
Recycling	Area/Unit					
Recyching	Alea/Onit					
MGB 240	1080 mm	715 mm	580 mm	16.0 kgs	240 ltr	Plastic

Containers are to be uniform on each residential property (Multiple collection/container styles are not allowed) Except with the written permission of Council's Waste Management Team.

# GARBAGE VEHICLE CHARACTERISTICS

9.7 Metre Garbage Truck	26 cu/yds capacity 25 tonne aggregate
Based on Vehicle for Residential Area Collections.	21.5. tonne tare weight
Dimensions	Height - 3.5 metres (Vertical Clearance 4.5m) Width - 2.4 metres (With Side Mirrors - 3m) Length - 9.7 metres Rear Load Overhang - 2.2 metres
Best Turn Possible	Turning Circle - 23 metres DIA Front Overhang - 22.5 metres DIA Front Outside Wheel -21.2 metres DIA Inside Rear Wheel - 14.35 metres DIA
Left Turn Better Than Right Turn	Front Overhang - 11.25 metres RAD Front Outside Wheel - 10.6 metres RAD Inside Rear Wheel - 7.17 metres RAD

#### GARBAGE TRUCK (DOMESTIC)

#### GARBAGE TRUCK (COMMERCIAL)

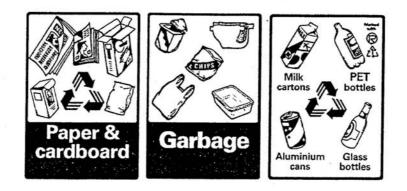
10.5 Metre Garbage Truck	26 cu/yds capacity 25 tonne aggregate
Based on Vehicle for Trade Waste	215 tonne tare weights
Dimensions	Height - 3.7 metres (Vertical Clearance 4.5m) Width - 2.5 metres (With Side Mirrors - 3m) Length - 10.5 metres Rear Load Overhand - 2.2 metres
Best Turn Possible	Turning Circle - 23 metres DIA Front Overhand - 23.8 metres DIA Front Outside Wheel - 22.25 metres DIA Inside Rear Wheel - 15.4 metres DIA
No Difference in Either Lock	Front Overhang - 11.9 metres RAD Front Outside Wheel - 11.9 metres RAD Inside Rear Wheel - 15.4 metres RAD

# **RECYCLING NOTICE**



The moebius loop or other recognised waste minimisation icon should be incorporated in signage to promote waste minimisation at the source point of waste re-use, recycling and disposal.

The moebius loop





(Source: resource NSW (2002))

Appendix A5.03

# NOTES ON EASEMENTS

Developments proposing internal collection points, waste storage and recycling facilities and garbage and recycling rooms should provide convenient access and a truck turning area to enable the collection of the receptacles from within the property.

#### EASEMENT REQUIREMENTS:

An easement entitling the Council, its servants and agents and persons authorised by it, to enter upon the subject land and to operate thereon vehicles and other equipment for the purpose of garbage and recycling collection, shall be granted to the Council by the owner of the subject land at the cost of the applicant, prior to occupation of the development and prior to registration of any plan of subdivision or strata subdivision of the subject land.

Such easement shall be in a form acceptable to the Council and shall include covenants to the effect that in the absence of negligence on the part of the Council, its servants, agents and those authorised by the Council to enter the subject property, they will not be liable for any damage caused to the subject land or any part thereof, or to any property located therein or thereon by reason of the operation thereon of any vehicle or other equipment used in connection with the collection of the garbage and recycling and to the effect that the owner for the time being of the subject land shall indemnify the Council, its servants, agents and persons authorised by it, to collect garbage and recycling against liability in respect of such claims made by any person whomsoever.

Documentation for the provision of the easement is to be submitted with the Subdivision or Strata Application.

NOTE: An 88(b) instrument is an acceptable form of easement subject to the area effected by the easement not requiring renewal upon sale or transfer at any time.

# TERMS OF EASEMENTS

#### Annexure to transfer granting easement from

#### TERMS OF EASEMENT

Full and free right for the Transferee its servants and agents and all persons authorised by the Transferee to go, pass and repass over the whole of the land hereinbefore described as the servient tenement at all times with or without vehicles for the purpose of collecting and removing garbage, recycling and refuse from the servient tenement and for the purposes incidental thereto *PROVIDED ALWAYS* that nothing herein contained shall entitle any person exercising the aforesaid rights to enter any building private open space/courtyard except to the extent necessary to gain access to garbage/recycling receptacles located therein in positions approved by the Transferee or to drive any motor vehicle on to any part of the servient tenement which has not apparently been constructed or provided for the purpose of a carriage way or parking area for vehicles and *PROVIDED FURTHER* that if the servient tenement is hereafter subdivided pursuant to the Strata Titles Act (as amended) the rights hereby granted shall be further restricted to the common property comprising in such strata plan and any lot comprised therein shall be released from the easement hereby transferred.

The rights hereby granted may be exercised by the Transferee its servants, agents and all persons authorised by the Transferee to enter the servient tenement without being liable for damage which may be occasional to the servient tenement or any improvements thereon including any paving,, driveways, footpaths, lawns, gardens, fences, walls, buildings or to the property of any person therein or thereon otherwise than by reason of the negligence of the Transferee, its servants and agents and/or of persons authorised by the Transferee.

Without limiting the generality of and notwithstanding anything hereinbefore contained, if any carriage way or parking area and/or the adjacent land supporting the same is damaged by reason of the movement thereon of any vehicle being used in connection with the collection of garbage/recycling from the servient tenement neither the Transferee its servants and agents nor any person authorised by the Transferee shall be liable in respect thereof. the Transferee its servants and agents and all persons authorised by it to exercise the rights hereby granted shall be indemnified and be kept indemnified by the Transferor its successors and assigns against all actions, suits, causes or action or suits, claims, demands, proceedings, costs, charges, damages, or expenses whatsoever which may be brought or made, instituted or claimed against and from them or any of them by the Owner or occupier of the servient tenement or any part thereof or by any person in respect of any loss or injury sustained or threatened or damages suffered or feared by any such person whether in property or person as a consequence of any act or thing done or omitted by any person whilst upon the servient tenement for the purpose of collecting garbage/recycling from the same or for a purpose incidental thereto except where such loss, injury or damages result from the negligence of the Transferee its servants, agents or of any person authorised by the Transferee as aforesaid.

Nothing herein contained shall oblige the Transferee to have garbage/recycling collections from points within the servient tenement or shall prevent the Transferee from discontinuing collection from within the servient tenement *PROVIDED ALWAYS* that if the Transferee discontinues collection of garbage from within the servient tenement the Transferee and the registered proprietor for the time being of the servient tenement shall respectively have the same rights and obligations with regard to the removal of garbage/recycling from the servient tenement as they would have had if this transfer had not been executed.

**NOTE:-** Council will accept a modified form of the easement in which the site of the easement is specifically defined by a plan which will be annexed to the transfer.

# WASTE GENERATION RATES

Type of Premises	Waste Generation	<b>Recycling Generation</b>
Medium/High and High Density Multi-Unit Housing	110L/unit/week	50L/unit/week
Backpackers accommodation	40L/occupant/week	20 litres/occupant/week
Boarding House, Guest House	60L/occupant/week	20 litres/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> /day	120L/100m²/day
Hairdresser	60L/1.5m <sup>2</sup> floor area/day	Discretionary
Restaurants	10L/1.5m <sup>2</sup> floor area/day	2L/1.5m <sup>2</sup> /day dining
Supermarket	240L/100m <sup>2</sup> floor area/day	240L/100m²/day
Takeaway	80L/100m <sup>2</sup> floor area/day	Discretionary
Hotel	5L/bed/day	50L/100m <sup>2</sup> /of bar & dining areas/day
Licensed Club	50L/100m2/bar/day	50L/100m <sup>2</sup> /of bar & dining areas/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	$E01/400m^2$ floor area (down	251 /400m <sup>2</sup> floor
Shop over 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day 50L/100m <sup>2</sup> floor area/day	25L/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

Source: Waverley Council. Code for the Storage and Handling of Waste.

## CODE FOR THE STORAGE & TRANSPORTATION OF CONTAMINATED/INFECTIOUS WASTE

Special conditions applicable to the storage and transportation of trade waste being contaminated wastes generated in hospitals, nursing homes, pathology laboratories, veterinary premises and other health care facilities.

#### Definition of Contaminated Waste

Contaminated waste is waste which has the potential to cause injury, infection or offence. Sources include medical, nursing, dental, veterinary, pharmaceutical and similar facilities engaged in treatment, investigation, teaching or research. Contaminated waste shall include:

**Contaminated Sharps:** any object capable of inflicting penetrating injury that has been contaminated with blood/body fluids, e.g. used needles, needle/syringe combinations and any other sharp objects or instruments capable of inflicting penetrating injury.

- **Bulk body fluids, blood and blood products:** including vessels, bags and tubing containing body fluids, blood/blood products.
- Dressings & disposable linen heavily soiled with blood/body fluid.
- **Microbiological and pathological waste:** including discarded laboratory specimens, cultures and materials that have contact with such, and biological reagents. (Refer to NSW Health Department Guide-lines, Section 5.7.6 Pathology Laboratories).
- **Tissue:** human tissue, organs, body parts, human foetuses, placentas and products of autopsy and animal tissue.
- **Other material:** which may be determined by the institution's Infection Control Officer/ Committee to present a significant risk of infection.

#### <u>NOTE</u>

• **Bulk body fluids:** should be drained into the sewage system provided that such disposal complies with the requirements of regulatory authorities and the procedure is carried out in a manner to exclude splashing to mucosa or non-intact skin.

#### 15.2 Storage Conditions

- (a) The occupier shall ensure, that where sanitary napkins/incontinence pads are generated in bulk, these wastes are handled, stored and disposed of as contaminated waste.
- (b) The occupier shall use standard yellow colour coded plastic bags labelled "Contaminated Wastes" for the storage of contaminated wastes.
- (c) The occupier shall segregate "sharps" by the use of enclosed rigid impenetrable containers, which comply with AS 4031-1992 before disposal in contaminated waste bags.
- (d) The occupier shall ensure that the bagged contaminated wastes, as required by Conditions No. 1 and No. 2, are placed in rigid containers. These containers shall be thoroughly cleansed prior to use and be leak proof, shock proof and have securely fitting lids.
- (e) The occupier shall ensure that contaminated wastes are stored or contained in a weather-proof secure location acceptable to the EPA isolated from any other wastes, and shall also ensure that the storage area is maintained in a condition which presents no threat to the environment.
- (f) Lids shall be securely fitted to the containers by means of a catch or similar device to ensure that the wastes are prevented from spilling at all times.
- (g) The occupier shall ensure that containers used for the storage of contaminated wastes are clearly marked with the wording "Contaminated Wastes". Where second-hand containers are used all other irrelevant markings shall be obliterated.
- (h) The occupier shall ensure that no radioactive substance as defined by the Radioactive Substance Act, 1957, is mixed or stored with any of the contaminated wastes.
- (i) The occupier shall record the collection dates and names of transporters in respect of the contaminated wastes. The information shall be retained for a minimum period of 12 months.
- (j) The occupier shall ensure that the storage area for contaminated wastes contains all necessary equipment required to clean and disinfect the area in case of accidental spillage.
- (k) The occupier shall ensure that all contaminated wastes generated on the premises are disposed of at a facility approved by the EPA.

## TRANSPORTATION OF CONTAMINATED/ INFECTIOUS WASTES

#### **Transportation Conditions**

- (a) The transporter shall ensure, that when sanitary napkins/incontinence pads are transported in bulk, these wastes are transported as contaminated waste.
- (b) Contaminated wastes shall be transported in rigid containers which have been thoroughly cleansed prior to use and which are leak proof, shock proof and have securely fitting lids.
- (c) Lids shall be securely fitted to the containers by means of a catch or similar device to ensure that the wastes are prevented from spilling at all times.
- (d) Containers which are to be re-used shall, in addition to complying with Condition No. 2 above, be thoroughly cleansed and disinfected with hospital strength disinfectant before re-use.
- (e) The transporter shall ensure that containers used for the transportation of contaminated wastes shall be clearly marked with the wording "Contaminated Wastes". Where second-hand containers are used all other irrelevant markings shall be obliterated.
- (f) Contaminated wastes shall be transported only in non-compaction vehicles.
- (g) Contaminated wastes shall be transported in vehicles dedicated exclusively to that purpose.
- (h) During transportation, containers holding the contaminated wastes shall be securely held inside the vehicle to prevent movement of the containers.
- (i) The bodies of vehicles used for the transportation of contaminated wastes shall be totally enclosed, separated from the driving cabin, and of a strong weather-proof construction acceptable to the Authority.
- (j) The transporter shall ensure that vehicles being used for the transportation of contaminated wastes shall be securely locked when left unattended.
- (k) The transporter shall ensure that vehicles containing contaminated wastes are parked in a secure area overnight.
- (I) Contaminated wastes should not be stored in vehicles over the weekend. Where circumstances beyond the control of the transporter require this to occur, the vehicle must be parked in a secure area under cover.
- (m) On arrival at the contaminated waste disposal depot, the transporter shall notify the depot of the nature of the contaminated wastes.
- (n) The transporter shall ensure that contaminated wastes are transported to and disposed of at a facility approved by the Authority.

(o) The transporter of contaminated wastes shall maintain a daily record of the names and addresses of the generators from which the contaminated waste was collected and the names and addresses of the depots approved by the Authority at which the wastes were disposed of. This record shall be available for inspection on request by Authority officers and shall be retained for a minimum period of 12 months.

## DEFINITIONS & ABBREVIATIONS

#### DEFINITIONS

For the purposes of this DCP, unless the context otherwise indicates, the following words have the meaning specified.

Access for Garbage Collection Vehicles – means vehicular access designed to enable ease of forward ingress and egress to internal collection points within a development for Council's specified garbage collection vehicles.

Access for Vehicles to and on Construction Site – Vehicular access to the site and on-site for contractors to deliver building materials or remove reusable, recyclable or disposable materials / wastes efficiently.

**Approved** - means approved by Council or an authorised officer of the Council.

Authorised Officer - means an officer authorised by the General Manager or Council.

**Class** - means the classification of a building as determined by the Building Code of Australia.

**Collection Area** - means the location where garbage, compostible material or recyclable materials is transferred from a buildings storage area to a collection vehicle for removal from the site.

**Collection Point** - means the usual (or agreed) point on the footpath, roadway, or on-site, where garbage and recyclables are loaded onto vehicles.

**Commercial and Industrial Development** - means a Class 5, 6, 7, 8, 9a or 9b building under the BCA, including: shops; offices; restaurants; industry; health care; and assembly buildings.

**Compactor / Waste Reduction Equipment** - means a device which reduces the volume of material, and includes shredding, pulverising and compressing devices.

**Compactor Room** - means the room where the compactor is loaded with waste.

**Compost** - means vegetative material capable of being converted to humus by a biological decay process.

**Composting Area** – means a designated area/s (detailed in landscape plan) for the conversion of vegetative material to humus by biological decay process.

**Container Room** - means the room where the container is located and may be the same room as the garbage room.

**Contaminated Waste** - means waste which has the potential to cause injury, infection or offence. Sources include medical, nursing, dental, veterinary, pharmaceutical and similar facilities engaged in treatment, investigation, teaching or research. Contaminated waste includes contaminated sharps, bulk body fluids, blood and blood products, dressings and disposable linen - heavily soiled with blood/body fluid microbiological and pathological waste and tissue.

**Coved** - means a concave curve of not less than 25mm radius in the angles formed by the intersection of the floor with walls and plinths.

**Dwelling** - means a room or a number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

**Dwelling House** - means a Class 1a building located within Residential A, AA, AM, AS, AT and Special Uses A and B zones under the Hornsby Shire Local Environmental Plan 1994 and where the "Dwelling House Development Control Plan" is applicable.

**Ecologically Sustainable Development** - is development that uses conserves and enhances the community's resources so that ecological processes on which life depends, are maintained and the total quality of life now and in the future can be increased (source National Strategy for Ecologically Sustainable Development).

**Food Waste Disposal Unit** – an incinerator unit or the like designed to reduce the volume and prepare food scraps for composting.

**Garbage** - means refuse or waste material other than trade waste, effluent, compostible material, green waste or recyclable material.

**Garbage Chute** - means a duct in which deposited material descends from one level to another with a building, due to gravity.

**Garbage Chute Branch** - means that part of the chute system between the loading hopper and the main vertical chute.

**Garbage Chute System** - means all the components to make a garbage chute operative and includes the garbage chute, loading hoppers, the canopy, service openings and service compartments.

**Garbage and Recycling Room** - means a room where garbage and recycling receptacles are stored awaiting reuse or removal from the premises.

Green Waste - means garden refuse.

**Hazardous Waste** - has the meaning specified in the Waste Minimisation and Management Regulation 1996 and includes dangerous goods, poison, liquids and other waste containing hazardous components. If in doubt contact the NSW Environment Protection Authority or Council.

**High Density Multi-Unit Housing** – means a Class 2 building under the BCA located within the Residential D zone under the Hornsby Shire Local Environmental Plan 1994 and where the "High Density Multi-Unit Housing Development Control Plan" is applicable. High Density Multi-Unit Housing usually takes the form of a multi-storey apartment building.

**Impervious** - means impermeable to water, moisture and grease.

**Loading Hopper** - means a device for receiving garbage and discharging it into a chute.

**Low Density Multi-Unit Housing** - means a Class 1a building under the BCA located within Residential A, AA, AM, AS, AT and Special Uses A and B zones under the Hornsby Shire Local Environmental Plan 1994 and where the "Low Density Multi-Unit Housing Development Control Plan" is applicable. Low Density Multi-Unit Housing usually takes the form of detached or semi-detached dwelling-houses.

**Medium Density Multi-Unit Housing** - means a Class 1a building under the BCA located within a Residential B zone under the Hornsby Shire Council Local Environmental Plan 1994 and where the "Medium Density Multi-Unit Housing Development Control Plan" is applicable. Medium Density Multi-Unit Housing usually takes the form of villa homes and townhouses.

**Medium/High Density Multi-Unit Housing** – means a Class 2 building under the BCA located within the Residential C zone under the Hornsby Shire Local Environmental Plan 1994 and where the

"Medium/High Density Multi-Unit Housing Development Control Plan" is applicable. Medium/High Density Multi-Unit Housing usually takes the form of three storey walk up flats.

**On-going Waste Management** – Legal waste management arrangement contained within the Strata or Community Management Plan to ensure reusable, recyclable, compostible and disposable wastes are managed appropriately to minimise waste and ensure the health and amenity of fellow occupants.

**On-site Sorting and Storage** – The location of on site storage space for building materials (for reuse) and containers for recycling and disposal.

**Putrescible Waste** - means food or animal matter (including dead animal parts) or unstable or untreated biosolids Development Control Plan" is applicable.

**Receptacle** - means approved type of containers, bins or other devices designed and used for the reception and storage of garbage and recycling.

**Recyclable** - means capable of being reprocessed into useable material and includes any item collected by Council's Recycling Service.

**Refrigerated Garbage Room** - means a garbage room which is refrigerated by a cooling system.

**Required** - means required by Council or any other Statutory authority.

**Residential Accommodation** - means a Class 1b, 3 or 4 building under the BCA, including: boarding houses; guest houses; hostels; lodging houses; and backpackers accommodation.

**Service Compartment** - means a compartment or separate room which gives access to the loading hopper and service opening.

**Service Opening** - means an opening provided in a wall of a service compartment in which the loading hopper is fitted.

**Storey** - means habitable or occupied space within a building between one floor level and the next floor level above or if there is no floor above, the roof.

**Sustainable Waste Management** - involves managing and controlling the generation of waste so that the needs of the current generation are met without limiting the options and capacity of future generations to meet their own needs.

**Trade Waste** - means refuse or waste material arising from any trade or industry but excludes liquid waste, demolition waste, building waste, contaminated waste, green waste or recyclable waste.

Waste - means:

- (a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- (b) any discarded, rejected, unwanted, surplus or abandoned substance, or
- (c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the substance, or
- (d) any substance prescribed to be waste by the Waste Avoidance and Resource Recovery Act 2002 or regulations/strategies prepared under the Act.

**Waste Cupboard Space** - means an appropriate space within the dwelling/building (usually located in the kitchen) for temporary storage of at least 1 days waste (including recyclables, compostible material and garbage.

Waste Management Plan – A proforma checklist that provides Council with details of the following:

- The volume and type of waste to be generated;
- Whether the waste will be re-used, recycled or disposed of
- Building materials and design techniques used; and
- How ongoing waste management will operate.

**Waste Storage and Recycling Area/Facility** - means a designated area/facility or combination of areas/facilities upon the site of a building for the housing of approved containers to store all waste material including recyclable material) likely to be generated by the building's occupants.

#### LIST OF ABBREVIATIONS

BCA	Building Code of Australia
DA	Development Application
DCP	Development Control Plan
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	NSW Environment Protection Authority
LAP	Local Approvals Policy
LG ACT	Local Government Act, 1993
LG Regs	Local Government (Approvals) Regulations, 1993

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NSW Environment Protection Authority: www.epa.nsw.gov.au

NSW EPA Waste Reduction and Purchasing Policy: www.wrapp.nsw.gov.au

Sustainable Energy Development Authority: <u>www.seda.nsw.gov.au</u>

Environment Australia: <u>www.ea.gov.au</u>

Australian Greenhouse Office: <u>www.greenhouse.gov.au</u>

OnSite: onsite.rmit.edu.au

Building Designers Association Website: www.bdansw.com.au

Housing Industry Assocation: www.hia.asn.au

PRISM: www.wrf.org.uk