

# NORTHERN BEACHES COUNCIL

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## Waste Management Guidelines

### Chapter 1 – Demolition

Effective Date : 1 November 2016

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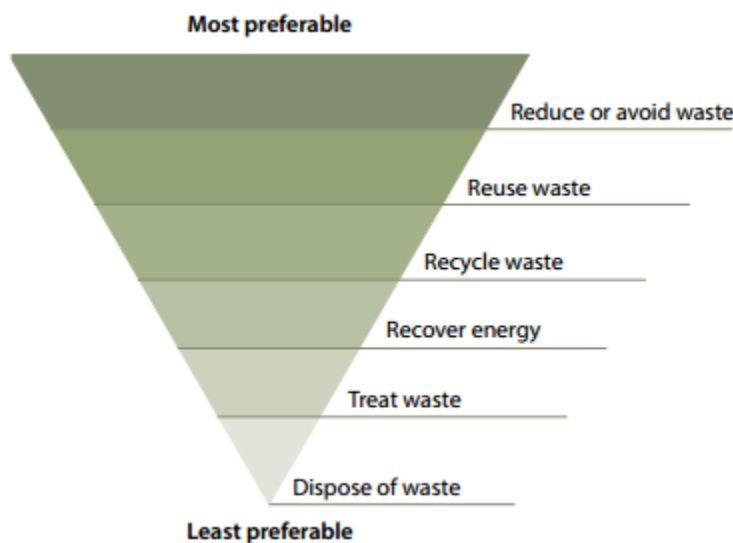
Demolition is the development stage with the greatest potential for waste minimisation. To maximise re-use and recycling of waste materials resulting from the demolition works, Council is seeking a change from a straight demolition to a process of selected deconstruction. For example, instead of putting all the waste into the same bin, the materials can be separated into different bins for re-use and recycling. This process can save the applicant money on the overall cost of the project.

**Applicants must complete ‘Section 1 – Demolition’ of the Waste Management Plan in accordance with this Chapter. Applicants must be able to demonstrate evidence of compliance if audited.**

## 1.1. Requirements

Applicants must demonstrate project management that seeks to:

- a) Incorporate the waste hierarchy principle of avoidance, resource recovery and disposal.



- b) Minimise the waste sent for disposal.
- c) Minimise the impact and disturbance on surrounding amenity, public safety, roadways and natural and built environment.
- d) Footpaths, public reserves, street gutters are not to be used as places to store demolition or construction waste or materials of any kind without Council approval.
- e) Adhere to any relevant legislation not limited to hazardous waste, storage and transportation regulations.
- f) Send waste materials to a suitably licensed facility.

- g) Identify suitable locations on the site for sorting and storing of materials for re-use, recycling and disposal. Factors to consider include slopes, drainage and personnel and vehicular access.
- h) Maintain valid tipping dockets and receipts on site for inspection.

## 1.2. Re-use and recycling opportunities

The table below provides guidance on re-use and recycling opportunities:

Material	Re-use and recycling opportunities
<b>Excavated materials</b>	Re-use for filling or levelling
<b>Concrete</b>	Re-use for filling, levelling or road base
<b>Bricks / Pavers</b>	Re-use or crush for landscaping and driveways
<b>Roof Tiles</b>	Re-use or crush for landscaping and driveways
<b>Untreated Timber</b>	Re-use as floorboards, fencing, furniture, mulch or send to second -hand timber suppliers
<b>Treated Timber</b>	Re-use as formwork, bridging, blocking and propping and send to second -hand timber suppliers
<b>Doors / Windows / Fittings</b>	Send to second- hand suppliers or recycle.
<b>Metals</b>	Re-use or recycle
<b>Green Waste</b>	Mulch or compost
<b>Plasterboard</b>	Re-use for landscaping, recycle or return to supplier
<b>Carpet</b>	Recycle or re-use in landscaping
<b>Plastics / Rubber</b>	Re-use or recycle

The closest waste and recycling facility to Northern Beaches Council is Kimbriki Resource Recovery Centre located in Terrey Hills, see website <http://www.kimbriki.com.au/>

Another comprehensive database resource is Planet Ark's Business Recycling hotline 1300 763 768 or website <http://businessrecycling.com.au/>

## 1.3. Estimating demolition waste

The table below provides estimates of likely construction waste for several different development types.

Material	Estimated Demolition Waste Quantities (per dwelling)			Estimated Demolition Waste Quantities (per 1000m <sup>3</sup> )		
	One Bedroom Brick and Fibre board House	Three Bedroom Brick House	Three Bedroom Weatherboard House	Residential Flats	Industrial Factory	Office Block
<b>Brick</b>	3 to 5 m <sup>3</sup>	10 to 15 m <sup>3</sup>	N/A	504 m <sup>3</sup>	158 m <sup>3</sup>	1142 m <sup>3</sup>
<b>Concrete</b>	4 m <sup>3</sup>	4 m <sup>3</sup>	20 to 30 m <sup>3</sup>	739 m <sup>3</sup>	407 m <sup>3</sup>	6736 m <sup>3</sup>
<b>Timber</b>	5 to 10 m <sup>3</sup>	12 to 15 m <sup>3</sup>	7 to 15 m <sup>3</sup>	10 m <sup>3</sup>	2 m <sup>3</sup>	56 m <sup>3</sup>
<b>Metal</b>	1 to 2 m <sup>3</sup>	N/A	20 to 25 m <sup>3</sup>	14 m <sup>3</sup>	35 m <sup>3</sup>	45 m <sup>3</sup>
<b>Plasterboard</b>	N/A	10 to 15 m <sup>3</sup>	4 to 6 m <sup>3</sup>	15 m <sup>3</sup>	3 m <sup>3</sup>	83 m <sup>3</sup>
<b>General Waste</b>	10 to 15 m <sup>3</sup>	N/A	N/A	26 m <sup>3</sup>	18 m <sup>3</sup>	155 m <sup>3</sup>
<b>Roof Tiles</b>	N/A	7 to 9 m <sup>3</sup>	N/A	25 m <sup>3</sup>	N/A	N/A
<b>Asbestos</b>	Variable m <sup>3</sup>	N/A	N/A	N/A	N/A	N/A

#### 1.4. Waste conversion factors

The conversion factors outlined below will act as a guide to help estimate waste quantities.

Material	Conversion Factor (Tonnes per m <sup>3</sup> )	Conversion Factor (m <sup>3</sup> per tonne)
<b>Bricks</b>	1.3 t = 1m <sup>3</sup>	0.8 m <sup>3</sup> =1t
<b>Concrete</b>	1.1 t = 1m <sup>3</sup>	0.9 m <sup>3</sup> =1t
<b>General</b>	1 t = 1m <sup>3</sup>	1 m <sup>3</sup> =1t
<b>Green Waste</b>	1 t = 1m <sup>3</sup>	1 m <sup>3</sup> =1t
<b>Plasterboard</b>	0.75 t = 1m <sup>3</sup>	1.3 m <sup>3</sup> =1t
<b>Steel</b>	0.65 t = 1m <sup>3</sup>	1.5 m <sup>3</sup> =1t
<b>Tiles</b>	1.3 t = 1m <sup>3</sup>	0.8 m <sup>3</sup> =1t
<b>Timber</b>	1.1 t = 1m <sup>3</sup>	0.9 m <sup>3</sup> =1t