



Bellingen Shire Development Control Plan 2017

Chapter 14 **Site Waste Minimisation & Management**

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Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

14.1. Aims

The aims of this chapter are to:

- a) Facilitate sustainable waste management in a manner consistent with the principles of Ecologically Sustainable Development.
- b) Minimise waste generated as part of the construction process and ensure its legal disposal.
- c) Effectively manage, store and legally dispose of waste generated in the ongoing operation of a development.

14.2. Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail

14.3. When This Chapter Applies

The provisions of this Chapter shall apply when Development Consent is required for any of the following:

- a) Demolition of buildings or structures,
- b) Construction of buildings or structures,
- c) Commercial and Industrial developments, and
- d) Changes of Use

14.4. Variations

Council may approve variations to the provisions herein in accordance with the principles of merit-based assessment.

Any request for variation to the provisions must be in writing and comprise part of the application. The request shall clearly demonstrate that:

- a) The aims of the DCP are met, and
- b) Compliance with the standard is unreasonable or unnecessary in the circumstances of the case.

14.5. Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010. Additional terms not defined in BLEP 2010 are included below.

Multiple dwelling construction means any Development Application that proposes, or would result in, the erection of more than one dwelling on a parcel of land.

Site Waste Minimisation & Management Plan (SWMMP) is a plan that outlines measures to minimise and manage waste generated during demolition, construction or by the ongoing operations of a site or premises.

In doing so, the SWMMP nominates:

- a) Volume and type of waste and recyclables to be generated,
- b) Storage and treatment of waste and recyclables on site,
- c) Disposal of residual waste and recyclables, and
- d) Operational procedures for ongoing waste management once the development is complete.

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

Note: Appendices to this chapter provide templates for the compilation of a SWMMP.

14.6. Assessment Criteria

14.6.1 Site waste minimisation & management plan (SWMMP)

All applications for development must be accompanied by a SWMMP.

The prescribed format for a SWMMP for;

- **Demolition** is attached as Appendix 14.1
- **Construction of Single Dwelling Houses, Secondary Dwellings and Alterations / Additions** is attached as Appendix 14.2.
- **Construction & Ongoing Operation of all other Residential Accommodation, Mixed use developments, Commercial Premises & Industries** is attached as Appendix 14.3.
- **Changes of use requiring development consent** is attached as Appendix 14.4.

Note:

- Potential opportunities for re-use or recycling of demolition materials are documented in Appendix 14.5.
- Indicative Waste & Recycling Generation rates for both Construction Waste and Ongoing operation are documented in Appendix 14.6.

14.6.2 Retention of evidence regarding disposal of waste

Construction and Demolition

Written evidence of records demonstrating lawful disposal of waste shall be retained and kept readily accessible for possible inspection by relevant regulatory authorities. Volumes of lawful waste disposal shall generally reconcile with relevant estimated volumes of waste documented in the SWMMP.

Note: An example of a Tax Invoice that would demonstrate lawful disposal of waste at an EPA licensed facility is included as Appendix 14.7.

Ongoing operation

Where estimated waste generation documented in the SWMMP is demonstrated as capable of being disposed of through the normal operation of Council's Kerbside Collection System and an ongoing Waste Charge is levied and paid, no further information will be required.

Where estimated waste generation documented in the SWMMP is not demonstrated as capable of being disposed of through the normal operation of Council's Kerbside Collection System or the operators elect to dispose of waste via alternative means, written evidence of a valid contract with a licensed waste contractor for the regular collection and disposal of waste and recyclables generated on site must be retained and kept readily accessible for possible inspection by relevant regulatory authorities.

14.6.3 Design features to facilitate effective waste minimisation and management

Aims

- a) To provide for the nuisance free storage and collection of waste from the site.
- b) To facilitate effective waste minimisation and recycling

Multiple dwelling construction

Having regard to the number of dwellings, the layout of the development and the length of the property frontage, a proposed method for garbage collection from the site must be detailed in the development application. This may involve the use of a standard residential service for each dwelling (i.e.: 3 x 240 litre bins) or the communal use of bulk bins for the overall facility (i.e.: 1100 litre bins). The following criteria shall inform the selected method/s for garbage removal;

- 1) On street collection of garbage bins shall not be permitted where the width of the total number of bins to be placed in a single row for collection would exceed the frontage of the site.
- 2) Areas used for the collective storage of garbage bins must be located so as to minimise adverse impacts on occupants and adjoining residents relating to noise and odour. Collective storage areas must be suitably screened from view from public places and other habitable areas, covered, bunded and drained to the Council sewer (with stormwater prevented from draining to this point), and constructed from materials that integrate with the design for the overall development. Where communal storage areas are provided, they shall be designed in accordance with Appendix 14.8 – Waste Recycling Storage Rooms in Multi-Unit dwellings).
- 3) Any proposal for garbage collection vehicles to enter private land to collect garbage shall not be permitted unless:
 - Adequate on site turning area is provided for the design collection vehicle,
 - The pavement in areas utilised by the collection vehicle is strengthened to account for the increased loading of the vehicle,
 - There is adequate vertical and horizontal clearance for the collection arm to deposit waste into the collection vehicle,

- The onsite manoeuvring and collection areas do not conflict with any required on-site parking spaces, and
 - Confirmation has been received from the service provider that they will enter the site for garbage collection purposes prior to determination of the development application
- 4) Developments shall be designed so that residents do not need to wheel garbage bins for a distance greater than 50 metres from the storage area to the collection point. Grades shall not be excessive so as to allow for the wheeling of bins by the typical resident. Note: The Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC, 2008) recommends a maximum grade of 1:14.
 - 5) Residential flat buildings must provide communal waste / recycling storage facilities designed generally in accordance with The Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC, 2008).
 - 6) For multi storey developments with 10 or more dwellings, a dedicated room / caged area is to be provided to store non-recyclable bulky items which are awaiting removal.

Commercial premises, industries, mixed use developments and changes of use

- 1) Every development must include a designated waste storage area and recycling room/s. These must be generally in accordance with the NSW EPA's "Better Practice Guidelines for Commercial and Industrial Facilities (2012)".
- 2) There must be convenient access from each tenancy and/or waste producing area to the required waste/ recycling storage areas or room/s.
- 3) Industrial developments should also specify designated storage areas for likely industrial waste streams, designed in accordance with specific waste laws / protocols.

APPENDICES

APPENDIX 14.1 - Site Waste Minimisation And Management Plan Template - Demolition

Applicant Details				
Name				
Address				
Phone Number				
Email				
Project Details				
Address of development				
Existing buildings & other structures currently on the site				
Description of proposed development				
<p><i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.</i></p>				
Name				
Signature				
Date				
Objectives Regarding Demolition Waste				
<ul style="list-style-type: none"> • Optimise adaptive reuse opportunities of existing building / structures • Maximise reuse & recycling of materials • Minimise waste generation • Ensure appropriate storage & collection of waste • Minimise environmental impacts associated with waste management • Avoid illegal dumping • Promote improved project management 				
		Most favourable ←	←	Least favourable
Type of waste generated	Reuse	Recycling	Disposal	Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used
	Estimate volume (m3) or weight (t)	Estimate volume (m3) or weight (t)	Estimate volume (m3) or weight (t)	
Excavation material				
Timber (specify)				
Concrete				
Bricks / pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				

Fixtures & fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper / cardboard				
Residual waste				
Hazardous/special waste eg: asbestos (specify)				
Other (specify)				
Plans & Drawings required with applications				Tick where provided
Size & location(s) of waste storage area(s)				
Access for waste collection vehicles				
Types & numbers of storage bins likely to be required				
Signage required to facilitate correct use of storage facilities				

APPENDIX 14.2 - Site waste minimisation and management plan template – construction of single dwelling houses, secondary dwellings and alterations / additions

Applicant Details				
Name				
Address				
Phone Number				
Email				
Project Details				
Address of development				
Existing buildings & other structures currently on the site				
Description of proposed development				
<p><i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.</i></p>				
Name				
Signature				
Date				
Objectives Regarding Construction				
<ul style="list-style-type: none"> • Maximise reuse & recycling of materials • Minimise waste generation • Ensure appropriate storage & collection of waste • Minimise environmental impacts associated with waste management • Avoid illegal dumping 				
		Most favourable ←	Least favourable	
	Reuse	Recycling	Disposal	
Type of waste generated	Estimate volume (m3) or weight (t)	Estimate volume (m3) or weight (t)	Estimate volume (m3) or weight (t)	Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				

Glass				
Plasterboard (off cuts)				
Fixtures & fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper / cardboard				
Residual waste				
Hazardous/special waste eg: asbestos (specify)				
Construction Design				
Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development. Eg:				
<ul style="list-style-type: none"> • Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that correct quantities are purchased (See Appendix 14.6 Waste/Recycling Generation Rates for a guide. • Incorporate use of prefabricated components and recycled materials • Identify potential reuse / recycling opportunities for excess construction materials • Consider organising to return excess materials to supplier or manufacturer • Arrange for delivery of materials 'as needed' to prevent degradation of materials through weathering & moisture damage. 				
Plans & Drawings for <u>construction process only</u> required with applications				Tick where provided
Size & location(s) of waste storage area(s)				
Access for waste collection vehicles				
Types & numbers of storage bins likely to be required				
Signage required to facilitate correct use of storage facilities				

APPENDIX 14.3 - Site waste minimisation and management plan template – construction and ongoing operations of all other residential accommodation, mixed use developments, commercial premises and industries

Applicant Details				
Name				
Address				
Phone Number				
Email				
Project Details				
Address of development				
Existing buildings & other structures currently on the site				
Description of proposed development				
<i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimizing waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.</i>				
Name				
Signature				
Date				
Objectives Regarding Construction				
<ul style="list-style-type: none"> • Optimise adaptive reuse opportunities of existing building / structures • Maximise reuse & recycling of materials • Minimise waste generation • Ensure appropriate storage & collection of waste • Minimise environmental impacts associated with waste management • Avoid illegal dumping • Promote improved project management 				
		Most favourable ←	←	Least favourable
Type of waste generated	Reuse Estimate volume (m3) or weight (t)	Recycling Estimate volume (m3) or weight (t)	Disposal Estimate volume (m3) or weight (t)	Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks / pavers				
Tiles				

Metal (specify)					
Glass					
Furniture					
Fixtures & fittings					
Floor coverings					
Packaging (used pallets, pallet wrap)					
Garden organics					
Containers (cans, plastic, glass)					
Paper / cardboard					
Residual waste					
Hazardous/special waste eg: asbestos (specify)					
Other (specify)					
Ongoing Operation – show the total volume of waste expected to be generated by the development and the associated waste storage requirements					
	Recyclables		Organics	Residual waste*	Other
	Paper, cardboard	Metals plastic glass			
Amount generated (l per unit per day)					
Amount generated (l per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number & size of storage bins required					
Floor area required for manoeuvrability (m2)					
Height required for manoeuvrability					
Construction Design					
Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development. Eg: <ul style="list-style-type: none"> • Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that correct quantities are purchased (See Appendix 14.6 Waste/Recycling Generation Rates for a guide. • Incorporate use of prefabricated components and recycled materials • Identify potential reuse / recycling opportunities for excess construction materials • Consider organising to return excess materials to supplier or manufacturer • Arrange for delivery of materials 'as needed' to prevent degradation of materials through weathering & moisture damage. 					

<u>Measures</u>	
Plans & Drawings required with applications; Construction Details	Tick where provided
Size & location(s) of waste storage area(s)	
Access for waste collection vehicles	
Types & numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	
Plans & Drawings required with applications; Ongoing Operation	Tick where provided
Space	
Size & location(s) of waste storage area(s)	
Recycling bins placed next to residual waste bins	
Space provided for access to and the manoeuvring of bins / equipment	
Any additional facilities	
Access	
Access route(s) to deposit waste in storage room	
Access route(s) to collect waste from storage room / area	
Bin carting grade	
Location of final collection point	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
Amenity	
Aesthetic design of waste storage areas	
Signage – type & location	
Construction details of storage rooms/area (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc..)	

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

APPENDIX 14.4 - Site waste minimisation and management plan template – change of use requiring development consent

Ongoing Operation – show the total volume of waste expected to be generated by the development and the associated waste storage requirements					
	Recyclables		Organics	Residual waste*	Other
	Paper /cardboard	Metals /plastic/ glass			
Amount generated (l per unit per day)					
Amount generated (l per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number & size of storage bins required					
Floor area required for manoeuvrability (m2)					
Height required for manoeuvrability					

APPENDIX 14.5 – Examples of demolition materials and potential reuse/recycling opportunities

(based on the *Combined Sydney Regional Organisation of Councils Model DCP 1997*)

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

APPENDIX 14.6 – Waste/Recycling generation rates

Construction Waste

'Rule of thumb' for renovations and small home building.

- Timber 5-7% of material ordered
- Plasterboard 5-20% of material ordered
- Concrete 3-5% of material ordered
- Bricks 5-10% of material ordered
- Tiles 2-5% of material ordered

Source: *Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998.*

Ongoing Operation Waste/Recycling Generation Rates

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

Source: Adapted from *Waverley Council Code for the Storage & Handling of Waste & Appendix A of Better Practice Guide For Waste Management in Multi-Unit Dwellings 2007.*

