Ballina Shire Combined Development Control Plan

Draft Chapter 19 – Waste Minimisation and Management

Adopted by Council
Effective from

TABLE OF CONTENTS

PREAMBLE

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

Sustainable resource management and waste minimisation has emerged as a priority action area and a key in seeking Ecologically Sustainable Development (ESD) outcomes. Critical actions required in this regard include reducing resource consumption, reusing, recycling and reprocessing as much as possible, and then only disposing of residual waste as a last resort.

A key component of this Waste Minimisation and Management DCP chapter includes the requirement for development proponents to submit a plan showing estimates of waste generation during demolition, construction and on-going use of the site as well as details on how these materials will be sorted, stored and removed for recycling and/or disposal.

The planning objectives, development controls, notes and advice contained in this chapter are based on the requirement to put these key actions in to practice.

PART 1 – PRELIMINARY

1.1 Citation and Land to Which the Plan Applies

This chapter of the Ballina Combined Development Control Plan is called "Chapter 19 – Waste Minimisation and Management". This chapter applies to all development that requires development consent.

1.2 Purpose of this Chapter

The purpose of this chapter is to set out Council's expectations for site waste minimisation and management, and to provide examples by which these expectations might be achieved.

The chapter provides standards, principles and objectives that will be applied to all development in order to achieve Council's expectations, and to promote ecologically sustainable development.

This chapter should also be used in an advisory capacity for Exempt and Complying Development.

1.3 Structure of this Chapter

This chapter incorporates written text, and figures for the purposes of establishing and clarifying development controls for all types of development within the Ballina Local Government Area.

A brief outline of the content and purpose of each part of this chapter is provided as follows:

Part 1 Preliminary
Part 1 provides an introduction to this chapter.

Part 2 Aims and Objectives
Part 2 provides aims and objectives of the chapter.

Part 3 Application to Development
Part 3 identifies the circumstances to which the provision of the DCP apply.

Part 4 Development Controls
Part 4 sets out the requirements of this chapter with respect to development.

Part 5 Dictionary

Part 5 defines the terms used within this chapter.

Part 6 References

Part 6 identifies documents and references used in the formulation of this chapter.

1.4 Savings Provisions

This chapter does not apply to development applications lodged before the date that the chapter came into effect.

1.5 Date on Which the Chapter Takes Effect

This chapter was adopted by Ballina Shire Council at its meeting held on xxxxxxx and came into effect on xxxxxx. This chapter applies to all development applications lodged on, or after, xxxxxxx.

1.6 Application of this chapter

This chapter applies to subdivision and engineering works, demolition, construction or change of use that may be carried out with development consent. The information contained in this chapter should also be taken into consideration where relevant to Exempt and Complying Development. See part 3 for further details.

1.7 Notes

Notes are included within various sections of this chapter to guide DCP interpretation. To distinguish the NOTES from the chapter generally, they are contained within a shaded box identified with a notepad symbol, as illustrated below. The NOTES do not form part of the formal requirements of the DCP.

Note: This is an example of the formatting of interpretive notes within this chapter of the DCP.

1.8 Variation to DCP Controls

Any development proposal must demonstrate consistency with the overall objectives of this chapter, although non compliance with the specific requirements could be allowed after considering the specific merits of the application. It should be noted also that some specific sections of this chapter provide further criteria required to be addressed in any application for variation of development controls. These will also need to be addressed dependent on the type of development proposed.

PART 2 – AIMS AND OBJECTIVES

2.1 Aims of this Chapter

The overall aim of this DCP chapter is to facilitate sustainable waste management within Ballina Shire in a manner consistent with the principles of ESD, and to:

a. Encourage the maximum reuse and recycling of obsolete or surplus building materials, household generated waste and industrial/ commercial waste;

b. Contribute to achieving Federal and State Government waste minimisation targets; and

c. Assist in minimising the overall environmental effects of waste.

2.2 Objectives of this Chapter

The objectives in pursuit of sustainable waste management are:

a. To minimise resource usage and the waste produced in construction through reuse and recycling and the efficient selection and use of resources;

b. To encourage adaptable building design, construction and demolition techniques which minimise waste generation;

c. To maximise reuse and recycling of household and industrial/ commercial waste;

d. To assist applicants in planning for sustainable waste management through the preparation of a site waste minimisation and management plan;

e. To assist applicants in developing waste management systems which ensure waste is transported and disposed of in a lawful manner;

f. To provide guidance in relation to space, storage, amenity and management of waste management facilities;

g. To ensure waste management systems are compatible with collection services; and

h. To minimise risks associated with waste management at all stages of development.

PART 3 – APPLICATION TO DEVELOPMENT

Part 3 identifies the types of development to which the planning provisions of chapter 19 apply. The development to which the chapter applies and the associated objectives and rationale is outlined below.

3.1 Subdivision and engineering works

The objective of waste management for subdivision involving engineering works is to reuse through source separation and onsite storage. Furthermore, to take into account various environmental factors such as slope, drainage, and location of waterways so as to minimise the environmental impacts associated with waste management.

3.2 Demolition

The objective of waste management at the demolition stage is to encourage adaptive reuse of buildings and structures and if not possible, to recycle. This could be achieved through planned work staging and careful on site storage and source separation, to allow for the reuse of solid waste either on site or off site.

Notes:

Materials that have an existing reuse or recycling potential should not be disposed of in a landfill. Table 3.1 provides a list of some potential reuse/ recycling options.

Reuse and recycling opportunities are decreased when asbestos is not carefully removed and segregated from other waste streams. Asbestos is a known carcinogen. The inhalation of asbestos fibres can cause mesothelioma, lung cancer, asbestosis and asbestos related pleural disease.

Asbestos is classified as a hazardous material. There are strict guidelines about how it should be packaged and transported, and where it can be disposed.

All asbestos must be specially wrapped, labelled and disposed of, as soon as possible, at a facility that can lawfully receive asbestos waste.

Always seek advice from Council about suitable health and safety precautions before disturbing asbestos materials. Visit www.health.nsw.gov.au for more information on the potential health effects of asbestos.

3.3 Construction

The objective of waste management at the construction stage is to minimise waste through utilising techniques such as improving on the purchasing policy (ordering correct quantities of materials), improved project management, use of prefabricated components, re use of materials, use of recycled materials, co-ordination and sequencing of various trades and minimisation of excavation works.

3.4 Operation and Occupation

The objective of waste management at the operation and occupation stage is to encourage waste separation, recycling and reuse through the availability of suitable infrastructure and the provision of suitable area for storage and collection of residual waste, recyclable and organic materials.

Notes:

The application of this chapter in relation to the types of activities identified above includes change of use development.

3.5 Preparation of a SWMMP

Based on the above, table 4.1 identifies 6 categories of development that require management to minimise the generation of waste and ensure the appropriate separation, storage and collection of waste. These categories have been identified to assist in highlighting the key issues for consideration in the preparation of a Site Waste Minimisation and Management Plan (SWMMP).

The development categories are:

a. Subdivision and engineering works.

b. Demolition.

c. Dwelling-houses and Dual Occupancy (including attached, detached and semi detached).

d. Multi unit residential (including townhouses, flats and villas).

e. Commercial, Industrial, mixed use developments and change of use developments.

f. Rural and other.

Notes:

Although development has been categorised here, it is important to note that each application will be assessed on an individual basis.

Table 3.1 Potential Reuse and Recycling Options

Material	Reuse/ recycling potential
Concrete	Reused for filling, levelling or road base. Depending on the size of the pieces, it may need to be crushed first.
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways.
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways.
Untreated Timber	Reused as floorboards, fencing, furniture, framing, mulched or sent to second hand timber suppliers.
Treated Timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers.
Doors, Windows, Fittings	Sell or give to second hand suppliers.
Glass	Reused as glazing or aggregate for concrete production.
Metals (fittings, appliances and wiring)	Removal for recycling, or sold to second hand suppliers.
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, or put in new organics bins.
Carpet	Can be sent to recyclers or reused in landscaping.
Plasterboard	Removal for recycling, or returned to supplier.

Source: Based on the Combined Sydney Regional Organisation of Councils Model DCP 1997

PART 4 – DEVELOPMENT CONTROLS

It is a requirement that all applications for development must be accompanied by a Statement of Environmental Effects (SEE). For development to which this chapter applies, the SEE is to include a Site Waste Minimisation and Management Plan (SWMMP). A SWMMP outlines how generated waste will be minimised and managed during development. An example of a SWMMP is attached in Appendix A.

4.1 Submission of a SWMMP

- A SWMMP must be submitted for all types of development that require consent. A more detailed SWMMP will be required for larger and more complex developments.

- The minimisation and management of site waste must be carried out in accordance with an approved SWMMP, and dockets retained on site to show where any construction and or demolition waste has been transported.

Notes:

The SWMMP is required at Development Application (DA) stage, with the exception of construction waste detail. This detail can be submitted with the Construction Certificate (CC) once a builder has been appointed.

The waste management facilities proposed as part of the development should be clearly illustrated on plans accompanying the DA.

In the absence of project specific waste and recycling calculations, the rates specified in Appendix B, and Council's current rate of provision of services to residential properties can be used to inform the preparation of a SWMMP.

A SWMMP is not required for Exempt and Complying development (according to Council's exempt and complying development criteria). However, in carrying out the development, generated waste should always be minimised during construction and operation of any activity.

Table 4.1 identifies categories of development that require management to minimise the generation of waste and ensure the appropriate separation, storage and collection of waste. The table also provides an indication of the matters that are to be considered in the preparation of a SWMMP.

Table 4.1 Matters for Consideration in SWMMPs

This table provides information and ideas for various types of developments with regard to minimising and managing waste. The information in it could be used to help prepare a SWMMP.

Criteria	Development category						
		Subdivision with engineering works	Demolition	Dwelling-houses and Dual Occupancy	Multi unit residential	Commercial, industrial, and change of use	Rural and other
Storage							
Stockpile	Environmental factors such as slope, drainage, proximity to watercourses and native vegetation to be taken in to account when deciding a stockpile location.	✓	✓	✓	✓	✓	✓
	Sufficient space to be provided for the storage of garden and other waste materials on site.	✓	✓	✓	✓	✓	✓
	Facilitate on site source separation.	✓	✓	✓	✓	✓	✓
	Facilitate and encourage reuse of materials on site.	✓	✓	✓	✓	✓	✓
Site waste receptacles	Provide sufficient space for recyclables and garbage on site.		✓	✓	✓	✓	✓
	Facilitate on site source separation.	✓	✓	✓	✓		✓
	Facilitate and adjust design to be able to reuse materials on site.	✓	✓	✓	✓	✓	✓
Waste cupboard	Provide space for temporary storage of recyclables, garbage and compostable materials in each development unit.			✓	✓	✓	✓
	Facilitate onsite source separation.			✓	✓	✓	✓
	Design and location to be accessible and useable.			✓	✓	✓	✓
	Design and locate to cater for change of use.					✓	✓
Garbage and recycling area/ room	Area or room to be large enough to store Council's standard bins efficiently.			✓	✓	✓	✓
	Accessible to all users and to Council's usual collection point.			✓	✓	✓	✓
	If communal areas are proposed – behind building line.				✓	✓	✓
	Provide area(s) for storage of bulky waste (e.g. clean up materials).				✓	✓	
	Volume reduction equipment where proposed.				✓	✓	
	Multiple areas are required if				✓	✓	

Criteria	Development category						
		Subdivision with engineering works	Demolition	Dwelling-houses and Dual Occupancy	Multi unit residential	Commercial, industrial, and change of use	Rural and other
	large development, or if site characteristics warrant it.						
Composting	Provision of external composting space.			✓	✓	✓	✓
	Must be separate to garbage and recycling room.			✓	✓	✓	
	Purpose built and incorporated into the landscape plan for the development.			✓	✓	✓	
	Potential impact on neighbouring properties assessed.			✓	✓	✓	✓
	Availability of on site composting facility to be well signposted.				✓	✓	
Garbage Shute	For developments larger than 3 storeys.				✓	✓	✓
Special Waste	Appropriate disposal as detailed by relevant authority.					✓	✓
Collection							
Collection point	On site.				✓	✓	✓
	At street frontage.			✓	✓	✓	✓
	Clear access is to be provided to facilitate pick up.			✓	✓	✓	✓
Management							
Waste management plans	Complete form 1	✓	✓	✓	✓	✓	✓
	Complete form 2		✓	✓	✓	✓	✓
	Complete form 3			✓	✓	✓	✓
	Complete form 4				✓	✓	✓
	Complete form 5				✓	✓	✓
Ongoing management	Implement administrative arrangements for ongoing management, including transportation of waste from garbage and recycling room to the collection point and to manage the composting procedure.				✓	✓	✓

PART 5 - DEFINITIONS

The definitions applicable to this chapter of the Combined DCP are as provided by the *Ballina Local Environmental Plan 1987* and the *Environmental Planning and Assessment Model Provisions 1980*.

PART 6 - REFERENCES

Department of Planning (1989). *North Coast Design Guidelines* [Online] http://www.planning.nsw.gov.au/

Department of Environment and Climate Change (2008) *A Site Waste Minimisation and Management Chapter for Consolidated Development Control Plans*

Workcover NSW *Asbestos Fact Sheet*

Legislation and Policy

Australian Building Codes Board, *Building Code of Australia*. [Online] http://www.abcb.gov.au/

Ballina Shire Council (1987). *Ballina Local Environmental Plan 1987 (BLEP)* [Online] http://www.ballina.nsw.gov.au

Local Government Act 1993. [Online] http://www.legislation.nsw.gov.au/

Protection of the Environment and Operations Act 1997 and Regulations [Online] http://www.legislation.nsw.gov.au/

APPENDIX A: SITE WASTE MINIMISATION AND MANAGEMENT PLAN TEMPLATES

Form 1 - Waste Management Plan (All Developments)

Applicant Details	
Application No.	
Name	
Address	
Phone number(s)	
Email	
Project Details	
Address of development	
Existing buildings and other structures currently on the site	
Description of proposed development	
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or WorkCover NSW.	
Name	
Signature	
Date	
Name and telephone contact for principal person nominated for implementation of SWMMP (if different to above)	Name: Telephone Contact:

Form 2 - Demolition Phase (all types of development)

Address of development:

The outcome of reusing is most desirable, recycling is a little less, and disposal is the least desirable outcome.

Type of waste generated	Reuse Estimate Volume (m^3) or weight (t)	Recycling Estimate Volume (m^3) or weight (t)	Disposal Estimate Volume (m^3) or weight (t)	Specify method of onsite reuse, contractor and recycling outlet and/ or waste depot to be used
Excavation Material	180m^3		20m^3	Topsoil for landscaping of site. Remainder to …..landfill site by….waste contractor.
Timber (specify)	2m^3	2m^3		Chip for landscaping, sell for firewood. Remainder to …. Landscaping supplies.
Concrete		20m^3	30m^3	Existing driveway to remain during construction. On completion to ….landfill site by …. waste contractor. Council to crush and reuse as a road aggregate.
Bricks/ pavers	90m^3		10m^3	Clean and reuse for footings and broken bricks for internal walls, or behind retaining wall. Concrete mortar bricks to….Ballina Waste Management Facility to be crushed and used as road aggregate,
Tiles			40m^3	Taken to tip where it will be crushed and reused.
Metal (specify)		0.5m^3	0.5m^3	Some to ….metal recyclers. Remainder to …..landfill.
Glass	0.5m^3	0.5m^3		Reused as glazing or aggregate for concrete production.
Furniture		1m^3	1m^3	Donate furniture that is still in tact to …… Remainder to be taken to ….landfill site by…..waste contractor.
Fixtures and fittings		2m^3	0.5m^3	Some to ….second hand building material supplier. Remainder to …..landfill.
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics	30m^3	20m^3	10m^3	Separated some chipped and stored on site for landscaping. Remainder to ….landscape supplies. Stumps and large trees to ….landfill by….waste contractor.
Containers (cans, plastic, glass)				Recycle what possible, remainder to ….landfill site.
Paper/ cardboard				Recycle what possible, remainder to ….landfill site.

Type of waste generated	Reuse Estimate Volume (m^3) or weight (t)	Recycling Estimate Volume (m^3) or weight (t)	Disposal Estimate Volume (m^3) or weight (t)	Specify method of onsite reuse, contractor and recycling outlet and/ or waste depot to be used
Residual waste			0.5m^3	Taken to ….landfill site by …….waste contractor.
Hazardous/ special waste e.g. asbestos (specify)				
Other (specify)				

Form 3 - Construction Phase (all types of development)

Address of development:

The outcome of reusing is most desirable, recycling is a little less, and disposal is the least desirable outcome.

	Reuse	Recycling	Disposal	
Type of waste generated	**Estimate Volume (m^3) or weight (t)**	**Estimate Volume (m^3) or weight (t)**	**Estimate Volume (m^3) or weight (t)**	**Specify method of onsite reuse, contractor and recycling outlet and/ or waste depot to be used**
Excavation Material	$150m^3$		$50m^3$	Topsoil for landscaping. Remainder to ….. landfill site by ….. waste contractor.
Timber (specify)	$2m^3$	$1m^3$		Chip for landscaping, sell for firewood, sell to second hand building material business or landscaping supplies.
Concrete	$30m^3$	$20m^3$		Existing driveway to remain during construction. On completion to ……landfill site for crushing and reuse.
Bricks/ pavers	$70m^3$	$30m^3$		Clean and reuse for footings and broken bricks for internal walls. Concrete mortar bricks to ….landfill site for crushing and reuse.
Tiles		3t		Crush and recycle at ….landfill site.
Metal (specify)		$0.5m^3$	$0.5m^3$	Some to scrap metal recyclers. Remainder to ….landfill site.
Glass				Reused as glazing or aggregate for concrete production.
Plasterboards (offcuts)		$10m^3$		Removal for recycling, return to supplier.
Fixtures and fittings		$5m^3$		Sell to second hand building material suppliers.
Floor coverings		$15m^3$		Underlay reprocessed for use in safety devices. Carpet used in landscaping.
Packaging (used pallets, pallet wrap)			$2m^3$	Taken to ….landfill site.
Garden organics	$2m^3$			Mulched and composted.
Containers (cans, plastic, glass)				Recycle what possible, remainder to ….landfill site.
Paper/ cardboard		$0.5m^3$		Recycle what possible, remainder to ….landfill site..
Residual waste			0.5t	Taken to ….landfill site by …….waste contractor.
Hazardous/ special waste e.g. asbestos (specify)				

Form 4 - Ongoing Operation Phase (Multi Unit, Commercial, Mixed Use and Industrial)

Address of Development:

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

	Recyclables		Compostables	Residual Waste	Other
	Paper/ Cardboard	Metals/ plastics/ 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 and size of storage bins required					
Floor area required for storage bins (m)					
Floor area required for manoeuvrability (m^2)					
Height required for manoeuvrability (m)					

Form 5 - Ongoing Operation Phase (Multi Unit, Commercial, Mixed Use and Industrial) Ongoing Management of Waste

Describe how you intend to ensure ongoing management of waste on site (eg, infrastructure, lease conditions, caretaker/ on site manager). ***Note: Approaches for the management of waste on site should address the relevant matters set out in Appendix C.***
1. The Company will prepare an environmental management system addressing office and retail waste and recycling. This will include expectations and achievable objectives for sorting and separating. Also, a regular waste audit. …..
2. An information package will be available to employees, which will be followed up every 12 months…….
3. The waste storage and recycling area will be suitably located and bins clearly labelled…..
4. A staff member (or cleaner) will be responsible for transferring materials to the area and keeping the area clean and tidy. …..
……..

Based on the Blacktown Development Control Plan chapter on Site Waste Management and Minimisation 2006

APPENDIX B: WASTE/ RECYCLING GENERATION RATES

The figures in the following table of waste and recycling waste generation rates can be used in preparing the SWMMP, unless exact figures or more appropriate figures are known.

Premises type	Waste Generation	Recyclable Material Generation
Backpackers Hostel	40L/ occupant space/ week	20L/ occupant space/ week
Boarding House, Guest House	60L/ occupant space/ week	20L/ occupant space/ week
Butcher	80L/100m2 floor area/ day	Variable
Delicatessen	80L/100m2 floor area/ day	Variable
Fish Shop	80L/100m2 floor area/ day	Variable
Greengrocer	240L/ 100m2 floor area/ day	120L/ 100m2 floor area/ day
Restaurant, Café	10L/ 1.5m2 floor area/ day	2L/1.5m2 floor area/ day
Supermarket	240L/ 100m2 floor area/ day	240L/ 100m2 floor area/ day
Takeaway food shop	80L/ 100m2 floor area/ day	Variable
Hairdresser, Beauty Salon	60L/ 100m2 floor area/ week	Variable
Hotel, Licensed Club, Motel	5L/ bed space/ day 50L/ 100m2 bar area/ day 10L/ 1.5m2 dining area/ week	1L/ bed space/ day 50L/ 100m2 bar area/ day 50L/ 100m2 Dining area/ day
Offices	10L/ 100m2 floor area/ day	10L/ 100m2 floor area/ day
Shop less than 100m2 floor area	50L/ 100m2 floor area/ day	25L/ 100m2 floor area/ day
Shop greater than 100m2 floor area	50L/ 100m2 floor area/ day	50L/ 100m2 floor area/ day
Showroom	40L/ 100m2 floor area/ day	10L/100m2 floor area/ day
Multi unit dwellings	80L/ unit/ week	40L/ unit/ week

Source: Adapted from Waverley Council Code for the Storage and Handling of Waste.

APPENDIX C- WASTE STORAGE REQUIREMENTS

The development must be designed to allow access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit the site in a forward direction and so collection vehicles do not impede general access to, from and within the site. Access driveways need to be of sufficient strength to support collection vehicles.

Waste/ recycling storage areas must be constructed in accordance with the requirements of the Building Code of Australia (BCA), and the space allocated for the area should be large enough to accommodate the three bin system that is currently in place in the Ballina Shire. The arrangements for servicing the bins need to be compatible with the operation of any other loading/ unloading facility on the site.

The waste/ recycling storage areas must be integrated into the design of the overall development by using the same building materials and finishes as the rest of the development. The areas must be located and designed in a manner that reduces adverse impacts upon neighbouring properties and the streetscape – in terms of its proximity to dwellings; noise associated with it; visibility of the area; and odours emanating from it.

The waste/ recycling storage areas must be the correct size to accommodate all types of waste bins required (three bin system in domestic collection areas) and large enough to cope with waste production in whatever area it is being used – commercial, industrial, multi unit, or residential.

The gradient of the storage area and floors (and any access ramps necessary) must be level enough so that the emptying of containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.

Access for emptying waste/ recycling storage containers must be able to occur in accordance with WorkCover NSW Occupational Health and Safety requirements. The storage area must have a smooth, durable floor and must be enclosed with durable walls/ fences that extend to the height of any containers which are kept within. The doors or gates to the storage area are to be operable from both the inside and outside, and should be wide enough to allow for the easy passage of waste/ recycling containers.

The waste/ recycling storage areas must include signage that clearly describes the types of materials that can be deposited into recycling bins, green waste bins and general garbage bins.

Arrangements must be made for the regular cleaning and maintenance of waste/ recycling storage areas. The waste containers must only be washed in an area which drains to a sewer authority approved drainage connection.