



# Development Control Guidelines

Operational Waste Management

for Industries





# **Operational Waste Management – for Industries**

The Industries section covers:

- Boat building and repair workshops (Foreshore and Waterways Development DCP 9.7);
- Intensive Agriculture (SEPP 30 and DCP 9.10);
- Vehicle repair workshops and depots;
- Sustainable Aquaculture (SEPP 62);
- Light, heavy and general industries, hazardous, offensive and high technology industries;
- Infrastructure (SEPP 2007); and
- Waste Management or Resource Recovery Facilities.

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# 5.1 Waste Management Plan - Industrial

Applicants must complete and submit an Operational Waste Management Plan (WMP) with their Development Application that confirms the development's compliance with the controls and guidance to meet operational controls that are relevant to each Zone and land use described in the DCP and WMG.

#### 5.1.1 What needs to be included in the operational waste management plan

The WMP identifies the types of waste that the development will generate and advises Council how this waste will be managed from its source through to its disposal at lawful reuse, recycling or landfill facilities.

The following documentation forms the WMP that Council will review to determine the ongoing waste management impacts of a proposed development:

- completed Operational WMP Checklist;
- 2. completed Operational WMP form;
- 3. design and/or landscape floor plan drawings (drawn to scale) showing:
  - all bins, facilities and areas to be used for on-site waste storage and collection; and
  - features of waste carting routes including door/gate widths, no steps, gradients and distances between waste storage and collection points;

where waste collection will take place on site, drawings showing:

- access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied; and
- 4. an updated copy of the waste management system information guide that will be provided to owners, occupants and property managers.

# 5.1.2 How to prepare the operational waste management plan

Complete the WMP checklist in section 5.2.3 as it relates to the proposed development type.

Complete the WMP form in section 5.2.4 as thoroughly as possible.

The WMP checklist and WMP form can be modified to include additional information if necessary.

Prepare design and/or landscape drawings that confirm the development's compliance with the controls and guidance to meet operational controls in the DCP and WMG, as prompted by the Operational Waste Management Checklist and WMP form.

After designing the waste management system, prepare a summary document to provide owners, property managers and occupants with an explanation on how to use the system to deliver optimal waste management outcomes. Topics to cover include proposed numbers and sizes of bins, waste storage locations and rules, collection frequencies, bin carting responsibilities, collection point locations and whether Council or a private waste collection provider will service the development.

Compile all of the above documentation into one Waste Management Plan PDF file (other than the Landscape and Floor Plans which can be separate) and lodge it as an attachment to your Development Application.

Demolition and Construction waste management plans are required in addition to the Operational WMP (see Sections 8.1 and 9.1 for more information on preparing these WMPs). Where approval for all stages of a development proposal will be sought at the same time, then all WMPs should be collated into one comprehensive WMP document and lodged as an attachment to the Development Application.



#### Tips for Preparing the Operational Waste Management Plan

- 1. List and estimate waste types and volumes (see section 5.3.1 for help).
- 2. Design and identify ways to avoid, reuse and recycle wastes (see section 5.3.2 for help).
- 3. Identify:
  - a. waste management equipment, bin sizes and collection frequencies and waste collection service provider(s) that can provide the above materials and services (see section 5.3.3 for help); and
  - b. waste destinations, recyclers, composters and landfills (see the Lake Macquarie Recycling Directory at <a href="https://www.lakemac.com.au/waste/other-household-waste">https://www.lakemac.com.au/waste/other-household-waste</a> for help).

#### 4. Design:

- a. waste storage areas (see section 5.3.4 for help);
- b. bin collection points, if waste collection is not direct from the storage area (see section 5.3.5 for help);
- c. routes between waste storage and collection points (see section 5.3.6 for help);
- d. routes between units and waste storage areas (see section 5.3.7 for help); and
- e. one to two days' waste storage in units (see section 5.3.8 for help).
- 5. Collate a waste system information guide to be provided to owners, property management and occupants (see section 5.3.9 for help).



# 5.1.3 Operational waste management checklist for industrial developments

The general objectives, controls and guidance to meet operational controls set for all industrial developments apply each of the following development types. However, specific land use controls under Part 9 of the DCP and Section 5 of the WMG set out additional guidance to meet operational controls that should also be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 5.2, 5.2.2, 5.2.3 or the DCP. For guidance, refer to the WMG section listed below:

- Foreshore and Waterway Development (includes boat building and marine repair workshops) (5.2.4)
- Intensive Agriculture (5.2.5)
- Vehicle Repair Workshops and Depots (5.2.6)
- Sustainable Aquaculture (5.2.7)
- Light, Heavy, General, Hazardous, Offensive and High Technology Industries (includes mining and extractive industries) (5.2.8)
- Infrastructure (includes civil construction) (5.2.9)
- Waste management or resource recovery facilities (5.2.10)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist - Operational Waste Management for Industrial Developments	
Summary of Application	
Site Address and Lot/Plan(s):	
Operational proposal - outline	
Number and scale of buildings, other structures and landscaping to be constructed:  Number	Scale
Other:	
Summary of property use(s): List main types of operational wastes that will be generated:	



**Applicant Information** 

Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation:
System for diverting operational waste to reuse, recycling or composting is maximised.
Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application.
The checklist has been completed accurately and in full.
The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.
Signature of Applicant or Authorised Agent: Date:

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed and can be effectively managed.				
Recyclable and problem waste (such as batteries, cooking oils and paint), which may be from boats or foreshore users, is separated managed separately.  Vehicle Repair Workshops and Depots – Additional Guidance  The Operational WMP identifies problem wastes and how these will be managed and correctly disposed or (where appropriate) recycled. Wastes considered include (from vehicles) batteries, motor oil, tyres, car parts, chemicals, electrical wastes and light globes; facility maintenance wastes.				
Vehicle Repair Workshops and Depots – Additional Guidance				
correctly disposed or (where appropriate) recycled. Wastes considered include (from vehicles) batteries, motor oil, tyres, car parts, chemicals, electrical wastes and light				
Light, Heavy, General, Hazardous, Offensive and High Technology Industries – Additional Guidance				
All wastes and estimated volumes that will be generated by the premises at peak weekly production are identified and those that can be separated for on-selling, industrial ecology uses, other reuse, remanufacture, repair, recovery or recycling will be allocated sufficient storage space to enable this.				
Infrastructure – Additional Guidance				
The Operational Waste Management Plan identifies any wastes that may be generated during operation, maintenance and repair activities of the infrastructure and how these will be managed (on-site storage or same day removal). This includes staff-generated meal break and bathroom wastes.				
Waste Management or Resource Recovery Facilities – Additional Guidance	YES	NOT YET	NO	N/A
The Operational Waste Management Plan addresses wastes generated on site by the business operation, such as office wastes and staff kitchen and bathroom wastes and the Detailed Operational Controls in relation to these wastes.				



Avoidance, Reuse and Recycling	YES	NOT YET	NO	N/A
Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have can access a range of waste services.				
Foreshore and Waterway Developments – Additional Guidance	YES	NOT YET	NO	N/A
The foreshore facilities will maximise opportunity for recycling (containers), other recyclables and food/green waste to be collected separately from garbage.				
Pollution risk to waterways or foreshore from hazardous/liquid wastes is avoided.				
Sustainable Aquaculture - Additional Guidance		NOT YET	NO	N/A
Beneficial use of animal, aquatic plant, animal food and other organic wastes is encouraged. These wastes are properly handled and treated in accordance with disease and weed prevention for uses including in aquaponics, energy production, animal feed stock, fertiliser production and composting.				
Light, Heavy, General, Hazardous, Offensive and High Technology Industries – Additional Guidance	YES	NOT YET	NO	N/A
Where the industry will be accepting second-hand feedstock (implementing industrial ecology) these activities are described and any additional waste management planning relevant to these activities is considered.				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and premises				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the premises.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council <i>Crime Prevention Through Environmental Design Guideline</i> .				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				
Bin enclosures contain measures to prevent entry by vermin.				



Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer.				
There is sufficient storage space and a disposal plan for bulk waste (i.e. furniture).				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold one days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Foreshore and Waterway Developments – Additional Guidance	YES	NOT YET	NO	N/A
No waste bins are installed on jetties or open structures over the water. Where bins are installed in buildings that project over the water, there must be no opening to the water that might allow waste to escape.				
Waste bins are installed on land near the land end of the jetty or structure where pedestrians can easily access them. These bins are installed at least four metres inland from the furthest reach of waves in storms, major lake waterway flood events and tides at highest king tide.				
The storage of hazardous or liquid wastes is completely enclosed and bunded to prevent spills reaching the water.				
Where boat maintenance is part of the activities to carried out at the facility, then the plan also provides for scrap metal recycling, boat engine oil, other boating liquid chemicals, empty chemical drums, batteries and any other special or recyclable wastes to be separately collected and appropriately managed.				
Separate bins for recycling, food waste, soft plastics and fishing line are provided.				
Intensive Agriculture – Additional Guidance	YES	NOT YET	NO	N/A
Intensive agriculture is managed to minimise offensive odours and to mitigate the exposure of existing residences to offensive odours.				
A Property Management Plan is to be prepared and lodged, which includes:				
i. The area to be used for agricultural production and any other uses on the site.				
iv. Any handling, processing and storage facilities.				
vi. Adequacy of road access to and within the lot.				
vii. The location of any proposed dwelling.				
xx. Waste management plan for all types of wastes that will be generated				
Vehicle Repair Workshops and Depots – Additional Guidance	YES	NOT YET	NO	N/A
Waste storage area(s) have sufficient space to accommodate the volumes of waste that will be generated and the numbers and sizes of bins identified for use in managing the waste.				
Secure waste storage area(s) are provided to store separated wastes in suitable bins, compactors and containers. This includes bunded containers or area(s) if waste oil or chemicals are to be stored.				
The waste storage area(s) are lit, secured and meet security requirements as per Council's Crime Prevention Through Environmental Design Guideline.				



Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Sustainable Aquaculture - Only	YES	NOT YET	NO	N/A
The development and operation meets any relevant waste management requirements of NSW government departments that manage fisheries, aquaculture, horticulture and agriculture.				
Any pharmaceutical or medical waste, sharps, body parts, dead animals and non-sterilisable items contaminated with contagious or zoonotic pathogens (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) is separated into containers or suitable bags, clearly labelled and separately stored in the waste storage area(s) to comply with Part 11 (Clause 113) of the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> requirements for the storage of clinical waste.				
Waste storage areas are designed to prevent access by rodents and insects with potential to be disease vectors.				
Waste storage can be secured from unauthorised access.				
To minimise odour and hygiene issues chilled storage options have been considered if fish or related parts will not be removed from the premises promptly. Waste that includes dead animals will not be left lying around, buried or cremated on site and will be taken to a licensed waste treatment facility proper disposal (with exception of approved waste to energy systems, waste treatment, hot composting systems and similar approved systems).				
Light, Heavy, General, Hazardous, Offensive and High Technology Industries – Only	YES	NOT YET	NO	N/A
Where the industrial premises will have kitchens, waste storage cupboard space is provided in or near each kitchen area, sufficiently sized to hold one days' volume of waste in four separated containers sized between two and twenty litres for recyclables (like glass, plastic containers, paper and cardboard), food waste, soft plastic and residual garbage.				
Where the industrial premises will have office spaces, bins to separate recyclable office wastes should be provided in the office, with a capacity for two days' waste.				
Waste storage area(s) is provided and shown on the floor or landscape floor plans, with all bins and waste management equipment outlined to scale. Waste storage area(s) may be within the shop floor area provided it is located with operational safety considered. Any bunding for storing problem wastes is shown.				
Where there are multiple businesses sharing a site, shared waste storage area(s) will be provided. If waste vehicles will not be able to access all industrial premises, or each premise will not have sufficient space for waste management, then a shared waste storage area is provided.				
Shared waste area(s) have recycling, green waste and general waste and sufficient space for all wastes estimated to be generated at peak production for all businesses. Where the types of businesses and waste volumes are not known, the waste storage area is large enough to accommodate a minimum of 240L of each of these three waste streams per business and 2 square metres of additional space per business.				
Infrastructure - Additional Guidance	YES	NOT YET	ОИ	N/A
Wastes will not be removed on a daily basis. Therefore on-site waste collection points will be established and are addressed in the Waste Management Plan and site drawing(s).				



Route from Buildings to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s) from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the door of the premises to the waste storage area is less than 100 metres in length.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The scaled plans show waste collection area with all bins shown to scale. Bins will be spaced with at least 300mm between bins and 300mm either side.				
The waste collection point(s) is unobstructed and is safely and efficiently accessible by Council waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants). Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.				
Bins will be placed out for collection in a reasonably flat kerbside location (bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, access to and from garages, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales and access to letterboxes.				
Intensive Agriculture – Only	YES	NOT YET	NO	N/A
Adequate buffers or other measures are implemented to ensure that residences or other sensitive receiving environments are not adversely affected by noise, odour, chemicals, or the like.				
Intensive agriculture is managed to minimise the impact of noise on residences. The recommended minimum separation distances of 60 metres for intermittent noise and 500 metres for continuous noise have been considered and adopted. If additional measures are necessary to mitigate noise impacts sufficiently. Then they will be implemented.				
Residential waste bins will be placed kerbside for collection if there is a suitable location is available. Commercial waste will be collected separately from an on-site location with sufficient road quality, clearances and swept path to enable safe access.				
Light, Heavy, General, Hazardous, Offensive and High Technology Industries – Additional Guidance	YES	NOT YET	NO	N/A
Where waste bins are to be emptied and bulky wastes loaded within or at the entrance to the building on the premises, waste vehicles are able to safely access, turn in and out and have clear overhead space to lift the bins and waste (for front, side or rear lift), as applicable.				
If kerbside collection of 240 litre (and 360 litre recycling) bins by Council or private waste service provider is desired, then these collections will only be arranged if there is sufficient kerb space in front of the premises to do so.				
Larger bins, bulk waste and multiple bins will all be collected from on site with the waste collection vehicle wholly within the site and not across the road or pedestrian pathway, nor obscuring road vision for those exiting the property driveway.				



Waste Collection and Removal	YES	NOT YET	NO	N/A
When the waste collection vehicle is in the collection position, it will not block driveway access for other heavy or light vehicles. It also will not obstruct access to any of the industrial premises entrances and fire exits.				
Infrastructure – Additional Guidance	YES	NOT YET	NO	N/A
Wastes will not be removed on a daily basis. Therefore on-site waste collection points will be established and are addressed in the Waste Management Plan and site drawing(s).				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show the bin carting route from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and does not contain steps, walls, fences without gates, narrow gates, vegetation, stepping stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length.				
Sustainable Aquaculture - Additional Guidance	YES	NOT YET	NO	N/A
Clinical and related waste is collected by a licenced waste transporter and taken to a facility licensed to accept those wastes.				
A Property Management Plan has been prepared and lodged with the development application that includes:				
i. The area to be used for agricultural production and any other uses on the site				
ii. Any waste handling, processing and storage facilities				
iii. Adequacy of road access to and within the lot where waste collection takes place				
iv. The location of any proposed dwellings				
v. Details of potential odours and noise				
vi. Waste management plan for all types of wastes that will be generated				
Residential waste bins can be placed kerbside for collection if a suitable location is available. Commercial waste is collected separately from an on-site location with sufficient road quality, clearances and swept path to enable safe access				



Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				
Sustainable Aquaculture - Additional Guidance	YES	NOT YET	NO	N/A
The waste information guide should contain sufficient information so that the owners, managers, staff, visitors, contractors and other occupants will be able to meet the				

Industrial Operational Waste Management Plan – Completion  Comments regarding any deviation from the waste management controls and guidance:				
Comments regarding any deviation from the waste management controls and guidance:	Industrial Operational Waste Management Plan - Completion			
	Comments regarding any deviation from the waste management controls and gu	idance	<b>)</b> :	
		1		
Waste Management Plan Checklist and coversheet has been completed and signed	Waste Management Plan Checklist and coversheet has been completed and signed			



# 5.1.4 Operational waste management plan for industrial developments

# **OPERATIONAL WASTE MANAGEMENT PLAN – INDUSTRIAL**

Ongoing use waste will be avoided or minimised by:
Attachments – the following documents are attached to this application:
Design and/or landscape floor plan drawings (drawn to scale) showing:
□ all bins, facilities and areas to be used for on-site waste storage and collection
□ door/gate widths, no steps, gradients and carting distances of route(s) between waste storage and collection points
Where waste collection will take place on site, drawings show:
□ access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied.
□ A copy of the waste management system information guide that will be provided to owners, occupants and property managers.

Type of industrial development  Number of occupants or staff:	Estimated amounts (m³ /Tonnes stored between collections)	Bin size and/or Volume reduction equipment capacity	No. of bins, balers and other equipment	Collection frequency	Reuse or recycling offsite Specify recycling collection service provider and recycling facility destination	Disposal to licenced landfill Specify waste collection service provider and landfill destination
Waste Type:					If Council collection services are used then below Where private collection contractor is used then	
Recyclable containers plastic and glass bottles / containers, Aluminium cans					Recycling is processed at Solo Gateshead facility	n/a
Cardboard and paper					Recycling is processed at Solo Gateshead facility	n/a
Green waste food and garden organic waste					Processed at Lake Macquarie Organics Resource Recovery composting plant located on the Awaba Waste Management Facility	n/a
Garbage other non-recyclable wastes					n/a	240L/fortnight Lake Macquarie City Council kerbside collection service.
Bulky waste furniture, mattresses,						
Problem wastes – sharps, medical, veterinary, sanitary						
<b>Liquid wastes</b> - grease trap, fats/oils, fuel, wastewater, other liquids, etc.						





Type of industrial development  Number of occupants or staff:	Estimated amounts (m³/Tonnes stored between collections)	Bin size and/or Volume reduction equipment capacity	No. of bins, balers and other equipment	Collection frequency	Reuse or recycling offsite Specify recycling collection service provider and recycling facility destination	Disposal to licenced landfill Specify waste collection service provider and landfill destination
Timber and Pallets						
Plastics (wrap/film, offcuts)						
Masonry						
Electronic waste						
Metals (specify)						
Fines						
Shredder flock						
Textiles						
Other (specify)						
Other (specify)						
Other (specify)						



#### 5.1.5 Waste Management Information Guide for Owners, Property Managers and Occupants - Example

Please submit with the Operational Waste Management Plan an updated version of this example waste management information guide that describes how the waste management for this development has been designed to operate.

# Waste Management Information Guide for Owners, Property Managers and Occupants

Address: (address of development)	

The following is information about how this development has been designed to accommodate separation of waste, waste storage and waste management.

#### **Internal Bin Storage:**

When developing and submitting an application to the Council for use of this industrial warehouse, plans should be made to storage and manage all wastes generated by the operation of the premises within the premises.

Or: A waste cupboard is available in the kitchen for bins between 2 litre and 20 litres size, so that you can separate and store 1-2 days of:

- Compostable food scraps for green lid waste bin kerbside collection
- Other recyclable containers and paper for yellow lid bin kerbside collection
- Batteries, mobile phones, smoke detectors, CDs and lightglobes for recycling
- Return and Earn containers
- · Plastic wrap and film for recycling
- Residual garbage for red (or black) lid kerbside collection

Bins are located in the office for separation and recycling of:

- · Paper and cardboard
- Printer cartridges
- Stationery
- Broken irreparable electronic equipment

Bins are located on the shop floor for:

- · Flattened cardboard boxes
- Industry-specific recyclable wastes through private waste services

#### Route from your unit to the external bin storage:

(if needed) Please use the goods lift to access the basement waste storage area. A ramp is available to access the shared bin storage area. The shared waste storage area closest to you should be used for your waste.

Businesses are responsible for taking or ensuring collection of their own special wastes such as plastic wrap, batteries and chemicals to the appropriate city disposal/recycling location.

# **External Bin Storage (or Shared Waste Storage Area):**

Location – Keep your bins in the bin room nook created for this purpose. Do not use the residential waste room for waste disposal. Bins are to be stored in the side/back/front yard behind the screen/water tank/garage out of view of the road/driveway/neighbours. The bin storage area for units 1-5 is located in the north east corner in the car park. The shared waste storage area for units 6-10 is located in the south-east corner near the stairs.





All food is to be disposed of in the food dehydrator. Do not include paper, tissues, plastic, cloth, cutlery or plates in the dehydrator. If you accidentally drop something in, advise the manager.

Separate your waste accurately, as per signage, otherwise the bins may not be able to be emptied or sent for recycling/composting.

Bins can be washed out using the tap in the waste storage area.

The light switch for the waste storage area is located to the left of the entrance doorway. Please turn the light off as you leave. The light switch for the waste storage area has a motion sensor and should turn on as you approach and will automatically turn off after ten minutes.

Please shut the gate/door to ensure vermin (and odours) are kept out. Please close bin lids to keep flies and other vermin out, minimise odours and ensure rain blowing under the eaves does not fill bins with water.

Disposal of bulk waste – used furniture, whitegoods, electronic waste, large furniture and mattresses – is the responsibility of each business. Businesses are encouraged to sell or donate safe, working equipment and furniture, or recycle where possible.

#### Placing bins out for collection:

Bins will be collected from the shared waste storage area.

Bins are to be place out on the kerbside on ABC Street for collection. Check with Council/Private Waste Contractor which night to place which bins out. (Or bins are to be placed out the front of your unit adjacent to the driveway). (Or caretakers/the nominated group bin monitor will place the bins out for collection the night before collection and bring bins back in.) Bins are to be brought back in within 24 hours of emptying.

#### Bin collections:

On bin collection day, customers must not park in front of the bins at kerbside (or in the loading zone). Please be patient and drive carefully while the waste collection staff/vehicle is collecting bins within the property.

Bins must be placed with a minimum of 30 centimetres between them and facing the road. All recycling and garbage bins should be placed together on the right side kerb (when facing the units) and all green waste bins to the left.

# **Other Notes:**

(Notes relevant to particular land uses or aspects of this design e.g. An onsite compost bin is available for use. Please do not include paper, meat, fish, bones, eggs, citrus peel or corn cobs in this compost bin. Please place these in the green lid kerbside bin.)

Sharps and medical waste must be kept separate and disposed of through the correct storage containers/bins/waste service.

This business recycles polystyrene, printer cartridges and clean timber. Bins and a bag are available in the waste storage room for these wastes.

Chemicals must be stored on the shelves in the bunded area and be fully sealed and contained to prevent leaks.



# 5.2 Waste Aspects of the Development Control Plan – for Industrial Developments

The Lake Macquarie City Council Development Control Plan (DCP) sets out broad objectives and controls for the operational uses of land.

#### **Zones (DCP Parts 2-7)**

Industrial developments can be built in General Industrial (IN1) Zone and depending on the nature of the industry, in other Industrial (IN2 and IN4), Rural (RU2, RU4 and RU6), Business (B2 to B7), Special Activity (SP1), Infrastructure (SP2) and Waterways (zone W1). (If the industrial activity is permissible in another zone, refer to the DCP. The controls below still apply.)

The applicable DCP objectives and controls for industrial developments are defined in each of the zones described in DCP Parts 2-7.

These broad objectives and controls are also summarised in Waste Management Guidelines (WMG) sections:

- 5.2.1 (objectives); and
- 5.2.2 (controls).

#### Guidance

The controls specified in the DCP require that all operational use waste management be undertaken in accordance with these WMG. In order to achieve effective operational waste management outcomes, guidance to meet controls should be met as this provides details on the controls listed in the DCP document.

The guidance is outlined in:

• 5.2.3 for all zones.

#### Specific Land Uses (Part 9)

Objectives and controls are also defined for specific land uses in DCP Part 9. The specific land uses relevant to industrial development covered in this section of the WMG are:

- 5.2.4 Foreshore and Waterway Development (DCP Part 9.7) (for Boat building and repair workshops); and
- 5.2.5 Intensive Agriculture (DCP Part 9.10) (see also State Environment Planning Policy number 30 (SEPP 30)).

Note: see WMG Section 2 for:

· Home business and industry

#### Additional Specific Land Uses (WMG Section 5)

The WMG defines additional guidance for specific land uses not presented within DCP Part 9. These include:

- 5.2.6 Vehicle repair workshops and depots;
- 5.2.7 Sustainable aquaculture (see also SEPP 62);
- 5.2.8 Light, heavy and general industries, hazardous, offensive and high technology industries (for mining and extractive industries, see also SEPP (Mining, Petroleum Production and Extractive Industries) 2007);
- 5.2.9 Infrastructure (see also SEPP (Infrastructure) 2007); and
- 5.2.10 Waste management or resource recovery facilities.



# 5.2.1 General operational objectives (DCP Parts 2-7)

The following objectives for waste management specified in the DCP apply in all zones to the industrial developments listed in section 5.2.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### **Objectives** (only those from the DCP relevant to waste)

- a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
- b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
- c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
- d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
- e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
- f. To ensure secure separation of commercial waste from residential waste storage and collection.
- g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
- h. To provide unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and waste storage points and to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

The following additional objective applies in Environment Protection Zones (E2, E3 and E4):

i. To integrate with the natural landscape.



# 5.2.2 Operational controls (DCP Parts 2-7)

The following controls for waste management specified in the DCP apply in all zones to the industrial developments listed in section 5.2.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

# Controls (only those from the DCP relevant to waste)

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in: in the list a to e below; in other parts of this Development Control Plan; or when Council identifies that particular circumstances warrant it.

Uses requiring an Operational Waste Management Plan:

a.	Dwellings
b.	Commercial and retail, recreation and tourism facilities
C.	Industrial developments and infrastructure
d.	Events
e.	Subdivisions

- 2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
- 3. The development application must demonstrate in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale that the development has sufficient and usable:
  - a. bin type, sizes, numbers and collection frequency; and
  - b. internal storage within premises; and
  - c. waste carting route(s) from premises to external waste storage area(s); and
  - d. external waste storage areas; and
  - e. bin carting route(s) from waste storage to waste collection point(s); and
  - f. waste collection point(s); and
  - g. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
  - h. waste management information guide for owners and occupants.
- 4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
  - i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
  - ii. commercial and retail premises;
  - iii. veterinary hospitals;
  - iv. aged care facilities;
  - v. child care centres;
  - vi. service stations;
  - vii. public and private recreation; and amusement and functions centres and entertainment facilities;
  - viii. vehicle repair workshops and depots;
  - ix. sustainable aquaculture; and



x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

#### 5.2.3 Guidance to meet operational controls – all zones

The following guidance for waste management apply in all zones to the industrial developments listed in section 5.2. Where a conflict exists between the DCP and the guidance presented in this section of the WMG, then the DCP prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### Guidance to meet operational controls - all zones

Bin type, sizes, numbers and collection frequency:

- Total waste volumes (in each of the separated waste types of comingled recycling, compostable
  organics (food and garden), residual unrecyclable garbage and any other separately recyclable
  waste types) that are anticipated to be generated from the operational use of the residential and,
  separately, the commercial use of the development in peak use times should be calculated and
  advised.
- 2. For each waste type, the bin type, bin size and number of bins and frequency of collection should be calculated and advised to ensure all waste is removed daily or each few days (for commercial volumes of waste of an odorous nature), weekly (for food organics) or fortnightly.

#### Internal storage:

3. Waste storage cupboard space should be provided in or near each kitchen area. This should be sufficiently sized to hold two days' volume of waste in at least three separated containers, sized between two and twenty litres. The containers should be for co-mingled recyclables (like glass, plastic containers, paper and cardboard), food waste, and residual garbage. (Preferably there should also be space for separate containers for other separable waste types such as soft plastic wrap, "return and earn" bottles and problem wastes (such as batteries, light globes and paint).)

#### Waste carting route(s) from premises to waste storage area(s):

- 4. Safe, lit access from dwelling or business exit to allocated bin storage area should be provided that is less than:
  - a. 100 metres in length for commercial developments;
  - b. 75 metres in length for residences; or
  - c. 50 metres in length for adaptable housing, seniors' developments, child care, food-serving premises and other businesses from which emptying of bins multiple times per day is desirable.



#### External waste storage area(s):

- 5. Waste storage area(s) should be provided and meet the following criteria:
  - a. Waste storage area(s) should be screened from the main living spaces of dwellings, public road and views from neighbours and as part of odour management should be located away from doors, windows and air intakes of all dwellings and businesses.
  - b. The waste storage area(s) should be capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins and any other proposed waste management equipment (such as bin carts and compaction equipment) required for managing the ongoing use waste generated by the property.
  - c. Waste storage area(s) should be readily accessible to all occupants in accordance with the Lake Macquarie City Council Non-Discriminatory Access Guidelines, should be secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council Crime Prevention Through Environmental Design Guideline.
  - d. The waste storage area(s) bin removal door or gate should not have a threshold step, should be at least 1200mm wide where bins up to 360 litres in size are used and should be at least 1600mm wide where bins up to 1100 litres in size are used. If doors or gates open inwards, no bins can be stored within the arc of the swinging door. If doors or gates open outwards they should not block the pathway for moving bins out.
  - e. Separate secured waste storage area(s) should be provided for commercial and residential wastes.
  - f. Bin enclosures should be in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.
  - g. Bin enclosures should contain measures to prevent entry by vermin.
  - h. Shared bin enclosures should have lighting, water supply and bin washing facilities that drain to the sewer.
  - i. Sufficient storage space and disposal plan for bulk waste, which includes furniture and whitegoods, should be provided.
  - j. Bins should be clearly marked with information on what types of waste are to be included in the bins. Yellow lids should be used for comingled recycling, lime green lids for food and garden organic waste, and red lids for residual garbage. Sky blue lids are appropriate for cardboard and paper (if privately serviced from commercial premises separately from comingled recycling).

#### Bin Carting Routes from Waste Storage to Waste Collection Points:

- 6. Mobile bin carting routes from the waste storage area to the bin collection point(s) should allow for unrestricted passage of bins and not contain steps, walls, fences without gates, narrow gates, vegetation, stepping stones, loose aggregates, or other obstacles. The distance and gradient should be suitable for the bin size as follows:
  - a. for wheeled bins greater than 360 litres and up to 660 litres, bin carting distances that are not over five metres at gradients that are not steeper than 1:30; and
  - b. for wheeled bins over 660 litres, bin carting distances that are not over three metres at gradients that are not steeper than 1:30
  - c.\*for wheeled bins up to and including 360 litres size, bin carting should be at gradients that are not steeper than 1:14 and distances that are not over:
    - iii.100 metres in length for commercial developments,
    - iv.75 metres in length for residences, or
    - v.50 metres in length for adaptable housing and seniors' developments;
  - \*Point C <u>does not apply</u> to multiple dwelling houses in <u>Rural Zones (zones RU2, RU3, RU4 and RU6)</u>.



#### Waste Collection Points:

- 7. The waste collection point(s) should meet the following criteria:
  - The waste collection area(s) should be sufficiently sized to enable collection from the property of all wastes generated;
  - b. Where mobile garbage bins (MGBs) 360 litre size and smaller are to be placed on the kerbside of a Council road or property's internal roadway for side-lift waste collection vehicle:
    - i.sufficient space should be allocated so that bins can be spaced with at least 300mm between bins and 300mm either side of a row of bins. These should be drawn on the landscape plans, with individual bins shown to scale at correct spacing; and
    - ii.bins should be placed out for collection in a reasonably flat kerbside location (such that bins will not fall over when emptied) that does not obstruct traffic and pedestrian flows, roundabouts, parking bays, No Stopping zones, bus stops, gutters, drainage swales, driver site lines, access to letterboxes, or access to and from garages; and where bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements:
  - c. Mobile garbage bins (MGBs) of 660 litre and 1100 litre size must be collected from onsite by waste collection vehicles entering the site, unless the site can meet the following criteria for the bins to be collected on the kerbside of a Council road by rear-lift waste collection vehicle, which requires:
    - i.a 1:30 gradient or flatter hard surface slab is to be provided within the property boundary and flush with the driveway to temporarily store the waste bins;
    - ii.the slab should have enough space to move bins around each other and replace empty bins while removing full bins, and should have stoppers to prevent bins running off the slab (while not preventing moving the bins to the kerb for emptying);
    - iii.the distance to move the bins along the driveway should be less than 5 metres and the gradient along and across the driveway to the kerb should be 1:30 or less;
    - iv.the road gradient should be less than 1:30 across and down the parking lane at the driveway; and
    - v.the 10 metre space immediately after the driveway should be retained as a stopping location for the waste collection vehicle (not car parking) on waste collection days. It may be No Parking, Loading Zone or Truck Zone.
      - (See Appendix 4 for information about bin spacing for kerbside collection)

# Waste Collection Vehicle Routes (onsite):

- 8. For any bins to be collected onsite, the access for waste collection vehicles should:
  - require a maximum of only one reversing manoeuvre to enter or leave the site and turn on site;
  - b. be able to stand wholly within the site and not block on-site car parking, or access and egress from the property;
  - c. meet specifications for pavement quality (for gross weight bearing), turn, width and height clearances and lift arc requirements for locally available waste collection vehicles (specifications as identified in the Lake Macquarie City Council Waste Management Guidelines);
  - d. for side-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for 10 metre length domestic side-lift waste collection vehicles (or be in accordance with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles);
  - e. for rear-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for rear-lift
    waste collection vehicles of 8 metres length (or be in accordance with the Lake Macquarie City
    Council Vehicle Access Guidelines Medium Rigid Vehicle (MRV) standard or have turns and
    cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles); and



- f. implement measures to mitigate the impacts of noise associated with the management of waste. (Noise should be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.)
- 9. Where the design does not provide for the current Council waste collection vehicle access specifications, a signed letter should be provided from a local waste service provider confirming that they can provide an alternative service. The letter must detail the alternative collection solution, the collection methods offered (such as runners and where the vehicle will park) and the specifications and dimensions of the waste collection vehicles that will be used.
- 10. Provision of Council waste services will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement.

## Waste Management Information Guide:

11. A copy of waste management information that will be provided to building owners and occupants is to be included in the development application.

# 5.2.4 Foreshore and waterway development – specific land use objectives and controls (DCP Part 9.7)

DCP Part 9.7 provides Council's specific land use requirements commercial foreshore and waterway developments, including commercial jetties.

Existing Industrial, Infrastructure and Business Park development on the foreshore and creeks includes:

- Zone SP2 Infrastructure (roads, rail and road bridges and electricity generation);
- Zone IN1 General Industrial (Cooranbong on Dora Creek); and
- Zone IN4 Working Waterfront (Pelican).

Industrial development in this category also includes boat building and repair workshops.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### **Objectives** (only those from the DCP relevant to waste)

- a. To protect the visual character and natural landscape of Lake Macquarie, by restricting the erection of buildings and structures at the Lake foreshore.
- d. To permit private development of foreshore land while maintaining foreshore public reserves and maintaining public access to the foreshore.
- e. To maximise opportunity for organic green waste, recycling and garbage to be collected separately for maximum resource recovery.
- f. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

#### Waste management at public and commercial facilities (DCP Part 9.7 – section 5.8)

**Objectives** (only those from the DCP relevant to waste)

- a. To maximise opportunity for waste from boats or foreshore users to be collected separately for maximum resource recovery.
- b. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.



#### Controls (only those from the DCP relevant to waste)

- 1. Applications for boatshed, jetty, slipway, boat ramps and other developments that extend over the water that are for commercial or public use must provide a completed Demolition, Construction and Operational Waste Management Plan (WMP) of the development, in accordance with Lake Macquarie City Council Waste Management Guidelines. The Operational WMP must enable separate management of garbage, recyclables and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users.
- 2. If boat maintenance is part of the activities to be carried out at the facility, then the plan must also provide for scrap metal recycling, boat engine oil, other boating liquid chemicals, empty chemical drums, batteries and any other special or recyclable wastes to be separately collected and appropriately managed.
- 3. Recyclable and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users, must be collected separately. This may include providing separate publicly accessible bins for garbage, recycling, food waste, soft plastics, fishing line and batteries and back of house bins for oils and paints.

#### 5.2.5 Intensive agriculture in Zone RU2 – specific land use objectives and controls (DCP Part 9.10)

DCP Part 9.10 provides Council's specific land use requirements for intensive agriculture. This applies only in Zone RU2.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### **Objectives** (only those from the DCP relevant to waste)

- a. To ensure that existing residences and other sensitive receiving environments, including conservation areas and aquifers, are not adversely affected by intensive agricultural activities.
- b. To ensure that intensive agricultural practices are sustainable and maintain a high standard of operation.
- c. To minimise adverse impacts of intensive agricultural practices on nearby residential land use without diminishing productivity of agricultural land.

# **Controls** (only those from the DCP relevant to waste)

- 1. Adequate buffers or other measures must be implemented to ensure that residences or other sensitive receiving environments are not adversely affected by noise, odour, chemicals, or the like.
- 2. Intensive agriculture must be managed to minimise offensive odours and to mitigate the exposure of existing residences to offensive odours.
- 3. Intensive agriculture must be managed to minimise the impact of noise on residences. A minimum separation distance of 60 metres is recommended for intermittent noise and 500 metres for continuous noise. Additional measures may be necessary to mitigate noise impacts sufficiently. Alternatives measures may be implemented to mitigate noise impacts.
- 5. A Property Management Plan is to be prepared and lodged, which includes:
  - i. The area to be used for agricultural production and any other uses on the site.
  - iv. Any handling, processing and storage facilities.
  - vi. Adequacy of road access to and within the lot.



- vii. The location of any proposed dwelling.
- xvi. Details of potential odours and noise.
- xx. Waste management plan for all types of wastes that will be generated.
- 6. Residential waste bins may be placed kerbside for collection if a suitable location is available. Commercial waste must be collected separately from on-site location with sufficient road quality, clearances and swept path to enable safe access.

Note: SEPP 30 may apply to this development.

#### 5.2.6 Vehicle repair workshops and depots – additional guidance

Additional guidance related to waste management apply to vehicle repair workshops and depots. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### **Objectives**

a. To ensure problem and special wastes can be separately and safely stored until collection for recycling or disposal.

#### Guidance

#### Waste type

1. The Operational Waste Management Plan must identify a list of types of problem wastes and how these will be managed and recycled where possible, such as light globes, batteries, motor oil, tyres, car parts, chemicals and electrical wastes from vehicles and building facility maintenance.

#### Waste storage area(s)

- 2. A secure waste storage area(s) should be provided to store separated wastes in suitable bins, compactors, containers, including bunded containers or area(s) if waste oil or chemicals are to be stored. The waste storage area(s) should:
  - i. be lit, secured and meet security requirements as per Council's *Crime Prevention Through Environmental Design Guideline*:
  - ii. have sufficient space to accommodate the volumes of waste and bin sizes identified to manage the waste as separated waste streams (based on reuse and recyclability);
  - iii. be visually screened and integrated with the built form and landscaping in terms of appearance, materials, form, scale, location and orientation; and
  - iv. be designed and located so as to mitigate noise and odour impacts on neighbours.
- 3. Any outdoor storage areas, including waste storage areas for problem wastes, must be bunded and protected from rainwater, stormwater and floodwater ingress.



#### 5.2.7 Sustainable Aquaculture (SEPP 62) – detailed operational guidance

Additional detailed operational guidance related to waste management apply to aquaculture developments.

The land use zones in which aquaculture can be undertaken are defined in the LMCC LEP. Within those zones, the zones within which pond-based or tank-based aquaculture may be developed are those specified in the State Environmental Planning Policy No. 62 Sustainable Aquaculture (2014) (SEPP 62).

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### Guidance

#### Waste Avoidance and Reuse

1. Beneficial use of animal, aquatic plant, animal food and other organic wastes is encouraged. These wastes are properly handled and treated for uses including in aquaponics, energy production, animal feed stock, food dehydration, fertiliser production and composting.

#### Waste types

- 2. The development and operation should meet any relevant waste management requirements of NSW government departments that manage fisheries, aquaculture, horticulture and agriculture.
- 3. Any pharmaceutical or medical waste, sharps, body parts, dead animals and non-sterilisable items contaminated with contagious or zoonotic pathogens (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) should be separated into containers or suitable bags. These bags should be clearly labelled and separately stored in the waste storage area(s) to comply with the requirements for the storage of clinical waste under the <a href="Protection of the Environment Operations (Waste) Regulation 2014">Protection of the Environment Operations (Waste) Regulation 2014</a> Part 11 (Clause 113).
- 4. A Property Management Plan is to be prepared and lodged, which includes:
  - i.the area to be used for agricultural production and any other uses on the site;
  - ii.the location of any proposed dwellings;
  - iii.any waste handling, processing and storage facilities;
  - iv.adequacy of road access to and within the lot where waste collection takes place;
  - v.details of potential odours and noise; and
  - vi.waste management plan for all types of wastes that will be generated.

#### Waste storage area(s)

- 5. Waste storage areas are designed to prevent access by pests with potential as disease vectors.
- Waste storage should be secured from unauthorised access.

#### Waste collection point(s)

- 7. Clinical and related waste is collected by a licenced waste transporter and taken to a facility licensed to accept those wastes.
- 8. To minimise odour and hygiene issues, chilled waste storage may be needed if dead fish are not removed from the premises promptly. Waste that includes dead animals should not be left lying around, buried on site or cremated on site (with exception of approved waste to energy systems, waste treatment, hot composting systems and similar approved systems).



9. Residential waste bins may be placed kerbside for collection if a suitable location is available. Commercial waste should be collected separately from an on-site location with sufficient road quality, clearances and swept path to enable safe access.

#### Waste information guide

10. The waste information guide should contain sufficient information so that the owners, managers, staff, visitors, contractors and other occupants will be able to meet the waste management plan requirements.

# 5.2.8 Light, general, heavy, hazardous, offensive and high technology industries – detailed operational guidance

Additional detailed operational guidance related to light, general, heavy, hazardous, offensive and high technology industrial developments. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### Guidance

#### Internal storage:

- 1. Where the industrial premises will have kitchens, waste storage cupboard space should be provided in or near each kitchen area, sufficiently sized to hold one days' volume of waste in four separated containers sized between two and twenty litres for recyclables (like glass, plastic containers, paper and cardboard), food waste, soft plastic and residual garbage.
- 2. Where the industrial premises will have office spaces, bins to separate recyclable office wastes should be provided in the office, with a capacity for two days' waste.

#### Waste types:

3. All wastes and estimated volumes that will be generated by the premises at peak weekly production should be identified and those that can be separated for on-selling, industrial ecology uses, other reuse, remanufacture, repair, recovery or recycling should be allocated sufficient storage space to enable this.

# Waste avoidance/reuse:

4. Where the industry will be accepting second-hand feedstock (implementing industrial ecology) these activities are described and any additional waste management planning relevant to these activities is considered.

#### Waste storage area(s):

- 5. Waste storage area(s) is provided and shown on the floor or landscape floor plans, with all bins and waste management equipment outlined to scale. Waste storage area(s) may be within the shop floor area provided it is located with operational safety considered. Any bunding for storing problem wastes is shown.
- 6. Where there are multiple businesses sharing a site, shared waste storage area(s) may be provided. If waste vehicles will not be able to access all industrial premises, or each premise will not have sufficient space for waste management, then a shared waste storage area should be provided.



7. Shared waste storage area(s) should have recycling, green waste and general waste and sufficient space for all wastes estimated to be generated at peak production for all businesses. Where the types of businesses and waste volumes are not known, the waste storage area should be large enough to accommodate a minimum of 240L of each of these three waste streams per business and 2 square metres of additional space per business.

#### Waste collection point(s)

8. Kerbside collection of 240 litre (and 360 litre recycling) bins by Council or private waste service provider can only occur where there is sufficient kerb space in front of the premises to do so.

#### Waste collection vehicle access:

- 9. Where waste bins are to be emptied and bulky wastes loaded within or at the entrance to the building on the premises, waste vehicles must be able to safely access, turn in and out and have clear overhead space to lift the bins and waste (for front, side or rear lift), as applicable.
- 10. Larger bins, bulk waste and multiple bins should all be collected from on site with the waste collection vehicle wholly within the site and not across the road or pedestrian pathway, nor obscuring road vision for those exiting the property driveway.
- 11. When the waste collection vehicle is in the collection position, it should not block driveway access for other vehicles. It should also not obstruct access to any of the industrial premises entrances and fire exits.

# 5.2.9 Infrastructure (SEPP 2007) – detailed operational guidance

Additional detailed operational guidance related to waste management apply to infrastructure developments. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### Guidance

#### Waste types

- 1. The Operational Waste Management Plan should identify any wastes that may be generated during operation, maintenance and repair activities of the infrastructure and how these will be managed (onsite storage or same day removal). This includes staff-generated meal break and bathroom wastes.
- 2. Sites with wastes that are subject to same day removal will not require on-site waste bins, waste storage areas or waste collection points.
- 3. Site for which wastes will be stored on site for later removal should provide an Operational Waste Management Plan addressing the relevant items of the Detailed Operational Guidance in 5.2.3.



# 5.2.10 Waste management or resource recovery facilities – detailed operational guidance

Additional detailed operational guidance related to operational waste management apply to waste management and resource recovery facility developments. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone - see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

#### Guidance

- 1. The Operational Waste Management Plan should address:
  - a. wastes generated on site by the business operation, such as office wastes and staff kitchen and bathroom wastes and the Detailed Operational Guidance in relation to these wastes:
  - b. the types, volumes and how and where the offsite wastes will be received, stored, processed, sorted and dispatched or landfilled; and
  - c. an overview, scope and the status of an application for a NSW Environment Protection Authority licence.



# 5.3 Operational Waste Management – for Industrial Developments

# 5.3.1 Calculating waste generation volumes for industrial businesses

Sufficient bin and waste storage capacity should be provided to accommodate the projected volumes of waste for the type of industrial use proposed by the development. All premises should have access to garbage and recycling bins. Businesses involved in food production, or have a high proportion of organic waste in their operations, should capture and recycle this waste separately.

Types and volumes of waste will vary substantially depending on what is going to be manufactured. It is important to try to project waste generation rates in order to determine the number and size of bins needed and the waste storage area requirements for the development. Industry associations or waste consultants can assist proponents of developments to identify specific waste generation projections.

In 2015 the NSW Environment Protection Authority (EPA) carried out audits of commercial and industrial operational waste streams and published the information in Table 20 about proportions and types of waste generated by this sector. While this information is generic, it may be helpful when trying to calculate how much waste the proposed industrial development is likely to generate.

Table 20 - Proportions and types of waste generated by commercial and industrial businesses

Waste Type	Average per cent proportion (of total business operational waste stream NSW commercial and industrial businesses surveyed)
Other – shredder flock, fines and pulp	30
Plastic wrap/film, offcuts and containers	14
Timber and Pallets	13
Paper	11
Food waste	10
Masonry	6
Cardboard	6
Textiles	3
Garden waste	3
Metals	2
Glass	2
Rubber	0.9
Electronic waste	0.4

NSW EPA, May 2015, Disposal-based audit - Commercial and industrial waste stream in the regulated areas of New South Wales

#### 5.3.2 Managing problem wastes

Where problem waste material will be generated, such as batteries, electronic waste, oils, chemicals and other potentially hazardous products, special disposal arrangements are required. Contact the NSW Environment Protection Authority about potential licensing requirements and on appropriate disposal options.



#### 5.3.3 Council waste service package options for businesses

Commercially rated properties pay one commercial waste management service charge with their rates that entitles the property to one weekly collection of a 240 litre garbage bin. The owner is responsible for supplying the bin. Owners of commercially rated properties can also opt into Council's recycling and food/green waste kerbside collection services for a fee. Additional waste collection options and bin sizes are available for a fee. See Table 21 for a full list. Bins may be shared between businesses if they are located in a shared accessible space, or they can be allocated stored in individual businesses.

Table 21 provides dimensions of all bin options available from Council's commercial waste service and should be used to design waste storage areas with sufficient space to store enough bins to serve the development.

Table 21 - Options for bin sizes for commercial-rated properties

Options for bins for multi-occupancy residential developments					
Size (litres)	Height (mm)	Width (mm)	Depth (mm)		
240	1060	585	730		
360 (recycling only)	1100	680	848		
660	1200	1260	780		
1100	1330	1240	1070		
1.5m3 (recycling only)	1170	2000	1070		
3m3 (recycling only)	1500	2000	1550		

#### 5.3.4 Designing operational waste management systems that avoid, reuse and recycle wastes

Ensuring that there is sufficient space and ease of access to recycling and green waste bins helps to maximise the diversion of recyclable and compostable wastes from the residual garbage bin. Bins should be co-located so that no extra effort is required to take wastes to the recycling or green waste bins. Signage should be very clear on what can and cannot go into the bins to help occupants avoid contamination and to maximise what can be recycled.

Workplaces can also establish a shared "swap" for bulk waste can facilitate reuse of resources. This is a space within the development where people can place items they want to give away for other occupants to take away if they wish. Leftover items can be donated to charity.

Extra room in the waste storage area enables options to flexibly install extra bins or tubs to capture additional separated waste streams. Where the commercial use of the development is known at the development application stage, the unique waste streams generated by the premises can be identified, planned and accommodated at the design stage. If businesses are not yet known, the types of businesses targeted should be identified and the waste streams from these possible businesses accommodated. If generic space is insufficient for waste management for potential types of businesses, then those future business will not be able to establish and operate on the property (unless they can avoid generating the waste on the property).

However, if a business can identify ways to avoid waste generation, then less space needs to be dedicated to waste and recycling bins. For example:

- manufacturing input products in offsite locations (where wastes generated are managed) and then brought to the workshop for installation;
- purchasing products that come in reusable or reduced amounts of packaging (e.g. avoiding excess plastic and cardboard packaging); or
- returning pallets to suppliers or sending them to a recycler.

#### 5.3.5 Equipment and bins

A wide range of equipment, bins and systems are available to support industrial operations manage their waste streams efficiently while reducing waste disposal costs. Businesses that generate a lot of packaging waste, particularly cardboard, may benefit from implementing compaction and baling equipment to better manage waste volumes. Baled cardboard has a commodity value and can be sold to recyclers.



The 1100 litre skip bin is a popular industrial waste bin choice for small to medium sized industrial businesses because of its versatility and mobility. Businesses that generate little waste may only need a set of 240 litre bins (one garbage, one recycling at minimum and a food/green waste bin if generating organic wastes. Larger 1-5 cubic metre skip bins are also available for industrial waste but cannot be easily moved around a site given their size and weight. They also require sufficient site access by front-lift waste collection vehicles.

Most industrial businesses will require bespoke waste management solutions and this information should be provided in the Operational Waste Management Plan.



Figure 17 - 1100 litre recycling bin

# 5.3.6 Waste storage and recycling areas

Industrial developments should be provided with a waste storage and recycling area designed and constructed in accordance with requirements of the guidance provided in Section 5.2. They should also be flexible in size and layout to cater for future changes of use. The waste storage area size should be calculated on the basis of waste generation rates (refer to section 5.3.1 for advice on anticipated waste generation rates and proposed bin sizes). Appendix 3 also provides dimensions and sample bin layouts for a range of bin sizes to assist with designing waste storage areas.

Where possible, access to the waste storage area should be from the rear of the property. In all cases, access to the waste collection points should be unimpeded. For large developments, a communal waste storage area should be included within the design.

# 5.3.7 When to have communal waste storage facilities

Industrial developments with multiple tenancies may require communal waste storage facilities, particularly:

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

The communal waste management facilities should be designed to enable each separately tenanted or separately occupied area within the building or complex to be provided with a designated and clearly identified space for the housing of sufficient containers to accommodate the quantity of waste and recyclable material generated.

The area(s) should be flexible in design to allow for future changes of use of the units.

The use of volume reduction equipment may be appropriate where space is a problem.

Considerations for design of commercial and industrial communal waste storage areas and collection points are the same as those outlined in Section 4 for commercial and retail premises.

# 5.3.8 Waste storage for individual industrial units

Every industrial unit should have a waste cupboard or alternative temporary storage area. The cupboard or storage area should be of sufficient size to store three bin caddies, or large bins if the business generates high volumes of waste. Minimum storage capacity should accommodate at least a single day's recycling, food waste and residual garbage and to enable source separation of garbage, recyclables and compostable material.



Specific waste storage needs should be identified and pre-planned at design stage. Where the types of future businesses that may occupy the space are unknown then the likely types of businesses that could tenant the property should be planned for in the design. It is important to be mindful that not providing sufficient waste storage space may limit the types of businesses that could tenant the property in future.

#### 5.3.9 Access from waste storage area to waste collection locations

Accessibility is one of the most important considerations for enabling waste collection services to the development.

If the collection point is on the street, the manoeuvrability of collection vehicles through the street is an important factor. Generally, this is a large-scale subdivision matter. Most development applications will relate to an existing street system.

The first decision is whether access onto the site is required. This would depend on the following:

- the size of the development whether travel distances for occupants require on-site storage and collection; and
- the volume of waste whether the number of bins is too great for the width of street frontage.

The location of on-site storage and recycling areas should reflect consideration of the following:

- accessibility to the usual or arranged on or offsite collection point;
- · access for individual occupants; and
- proximity to site occupants and adjacent properties in terms of noise and odour control.

If the complex has internal private roads, or driveways accessing waste storage areas and the plan is to present the bins there, the internal roads and driveways should be designed to accommodate Council's and contractor's waste service collection vehicles.

The Waste Management Plan should include instructions to the developer that at least 3 months before the units will be occupied, the Council should be contacted to inspect potential for waste service provision. Council and Council's recycling and green waste contractors will then conduct a site assessment to determine whether the requested service(s) are able to be provided at the property. The assessment will include:

- bin storage and security;
- ability for residents or caretaker to manoeuvre the bins to and from the kerbside or roadway for servicing;
- · contamination potential; and
- · accessibility for collection on site or at the kerb.

If the waste services can be provided on site, letters of indemnity will need to be signed by the strata owners' corporation or authorised managing agent to give Council and Council's contractors permission to drive on the private road. If access onto the site is required for a Council commercial waste collection service then refer to section 5.3.12.

#### 5.3.10 Waste collection points

It is critical when designing waste services that there is sufficient space to place bins out for collection, whether along Council roads, or along approved and indemnified internal access roads or driveways.

Designs should never plan to have bins placed for collection such that the bins obstruct driveway exits and entrances.

For most properties, the bins should be placed out on the kerb of the public road at the front of the property. Each week two bins are placed, at a spacing of at least one metre centres with at least a 300mm gap between bins. The gap is needed to ensure quick collection by the side lift trucks that grip the sides of the bins to lift and empty them. For battle-axe blocks, one bin can be placed on the kerb either side of the driveway.



Alternative collection points can be discussed with Council if there is no space on the kerb that can be provided that is:

- flat enough for bins to stay upright when placed back down by the waste collection vehicle;
- unobstructed by overhead signs or tree canopies, or too close to retaining wall or fences;
- obstructed most of the time by parked vehicles;
- away from intersections and other places where waste collection vehicles cannot safely stop;
- accessible from the bin storage area (for example a public road back lane may be closer to the bin storage area rather than the main street in front of the property); and
- bins should not be placed in gutters as this obstructs stormwater run-off.

# 5.3.11 Collection requirements for larger bins by rear and front lift collection vehicles

Businesses with larger bins (660 litre, 1100 litre, 1-5 cubic metre bins) should position them for collection where a waste vehicle can reverse up, or drive front on, to them then lift the bins into their hoppers without striking any overhead or adjacent obstacles. Where large mobile bins are used and where agreed by the service provider, waste collection crews can generally move bins up to 3 metres to the vehicle to empty it, provided the bin is sitting on a smooth paved surface with a slope of less than 1:30.

Refer to sample layouts provided in Appendix 3 to calculate minimum dimensions for waste storage areas where 660 and 1100 litre bins will be used inside a bin storage area.

# 5.3.12 Collection from within the property boundary for Council commercial waste service

If the industrial development owner wants to receive an on-site Council waste collection service (that collects bins from within the property boundary) then a Deed of Agreement between the business owner, or strata on behalf of owners and the Council is required to indemnify Council for any damage to property. The owner is also responsible for Council's legal costs regarding the Deed of Agreement if variations to Council's standard deed are required. For more information, contact Council on 02 4921 0333.

The on-site collection and Deed of Agreement cannot be offered unless a site inspection of the as-built property indicates that there are no issues that would otherwise prevent safe access and collection. Council will consider all of the following factors as part of the inspection:

- the pavement must be of sufficient weight-bearing capacity;
- the pavement needs to be industrial-strength, designed for a maximum wheel loading of 7 tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh, but the specifications should be checked with a qualified engineer; and
- a minimum pavement width of 5.0m (or 6.5m if more than 24 vehicles park along the road, unless suitable passing bays are provided).
- all clearances and turn circles must meet minimum requirements, including no obstruction from trees, light poles, bollards, road kerbing, inadequate roundabouts, signs and overhead awnings;
- the operational use of the development should not obstruct access to bins. For example parked cars,
  delivery vehicles or site maintenance vehicles cannot be parked in ways that would interfere with
  waste collection operations. Care should also be taken to ensure staged construction activities do not
  initially prevent access for waste collection services to the early occupied dwellings while later stages
  are being built;
- Council and Council contractors do not currently enter secured areas that require keys for access (although private waste contractors may do so);
- Council and Council Contractors do not currently enter underground or under-building car parks (although private waste contractors may do so);
- one way roads should have all bins placed on the left side of the road for side lift collection vehicles;
- loop roads or large enough turn circles at cul-de-sac ends that require no three point turns are the safest solution, as all reversing is risky;



- if there is to be kerbside collection in an outside turn on a corner or in a cul-de-sac, then a minimum kerb radius of 10 metres is required:
- vehicles must not be required to make a three point turn to turn corners;
- exit from and re-entry to the Council road(s) must be safe to execute;
- the longitudinal road gradient must be less than 1:7 (15 per cent) and the turning heads must be maximum gradient of 1:10 (10 per cent); and
- some development designs may be best resolved by installing a heavy vehicle turntable rather than allocating large turn space.

#### 5.3.13 Private commercial waste collection service inside buildings and basements

For private waste contractors to enter buildings and basements, the following requirements must be met:

- ramp access gradient must be no more than 1:8;
- the height clearance over all areas traversed by waste collection vehicles must be sufficient for the waste vehicles to be used to enter, which is generally requires at least 3.8 metres height clearance;
- vehicle exit in a forward direction; if a turning area is required then it must be in an area that is not used for car parking and ensure that the turning circle is clear of all obstructions; and
- the ramp and floor pavement needs to be industrial-strength, designed for a maximum wheel loading of 7 tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh. Specifications should however be checked by a qualified engineer.

#### 5.3.14 Waste system information guide for industrial businesses owners, managers and occupants

A waste system information guide should be provided to commercial and industrial business owners, occupants and property managers and handed on to new owners, managers and occupants. The guide should outline:

- the approved waste service system and how to use it;
- approved locations for bin storage;
- options within the approval for alternative waste service solutions; and
- wording to be included in tenancy agreements about the waste management system.

A property plan should be included to show the locations of:

- · waste cupboards in the businesses or tenancies;
- individual and communal waste storage area(s) within the development; and
- the waste collection point(s).

# 5.3.15 Information for waste management facility industrial developments

A Waste Management Facility is a type of industrial development that involves additional scrutiny in planning approvals. These facilities may be a landfill, waste transfer station, organics processing facility, energy recovery facility, waste hammer mill or pyrolysis facility, collection point for recyclables, sorting facility for recycling, recyclate processor, or similar facility that collects, handles or processes waste.

Consultation should be undertaken as early as possible with NSW Environment Protection Authority (EPA) regarding proposed design and potential licence conditions. The State Environmental Planning Policy (Infrastructure) 2007 (Division 23 Waste or resource management facilities) may also apply.

Depending on volumes of waste received and stockpiled on site, most of these facilities require an Environment Protection licence as well as a development approval and are Integrated Development approvals. Schedule 1 of the *NSW Protection of the Environment Operations Act 1997* lists all scheduled activities and the thresholds for licensing. As at December 2016, these activities are:

• composting (bioconversion, biodigestion, vermiculture, shredding, chipping, mulching or grinding) with a threshold of 200 Tonnes (or 400 cubic metres) sourced from offsite at any one time on site;



- container reconditioning (receiving, reconditioning, recovering, treating or storing containers previously used to transport or store certain Dangerous Goods) with a threshold of 100 containers;
- energy recovery (from general, hazardous, restricted, liquid or problem waste but not contaminated soil) with thresholds of 200 Tonnes per year of general waste or 200kg on site at any one time of hazardous and other wastes;
- resource recovery from general waste (where 50 per cent or more of the waste is recovered) with thresholds of more than 1000 tonnes (or 1000 cubic metres) on site at any time or more than 6000 Tonnes per year;
- resource recovery from hazardous or other waste (where 50 per cent or more of the waste is recovered) (from hazardous, restricted or problem waste, but not waste oil, waste tyres, liquid waste, stormwater, contaminated soil, contaminated groundwater, sewage or asbestos) with thresholds of more than 200 kilograms on site at any time;
- resource recovery from waste oil (where 50 per cent or more of the waste is recovered) with thresholds of more than 2000 litres on site at any time or more than 20 Tonnes per year;
- resource recovery from waste tyres (where 50 per cent or more of the waste is recovered) with thresholds of more than 5 tonnes (or 500 tyres) on site at any time (other than in waste transport vehicles parked at site) or more than 5000 Tonnes per year;
- waste disposal (application to land of waste from offsite by spraying, spreading, depositing on land, ploughing, injecting, mixing into land, filling, raising, reclaiming or contouring the land, except if only virgin excavated natural material or less than 200 Tonnes of building and demolition with or without virgin excavated material is applied in the life of the land) with no more than 5 tonnes (or 500 tyres) on site at any time;
- waste disposal (thermal treatment of waste from offsite except contaminated soil, groundwater or sewage) with no more than 200 tonnes of general waste processed per year, or any clinical waste, or 200 kg other hazardous, restricted, liquid or problem waste on site at any time;
- waste processing (non-thermal treatment) from general waste (where 50 per cent or more of the
  waste is recovered) with thresholds of more than 1000 tonnes (or 1000 cubic metres) on site at any
  time or more than 6000 Tonnes per year;
- waste processing (non-thermal treatment) from hazardous or other waste (where 50 per cent or more
  of the waste is recovered) (from hazardous, restricted or problem waste, but not waste oil, waste
  tyres, liquid waste, stormwater, contaminated soil, contaminated groundwater, sewage or asbestos)
  with thresholds of more than 200 kilograms on site at any time, or if any amount of clinical waste;
- waste processing (non-thermal treatment) from liquid waste (where 50 per cent or more of the waste is recovered) (not waste oil) with thresholds of more than 200 kilograms on site at any time, or if any amount of clinical waste;
- waste processing (non-thermal treatment) from waste oil (where 50 per cent or more of the waste is recovered) with thresholds of more than 2000 litres on site at any time or more than 20 Tonnes per year;
- waste processing (non-thermal treatment) from waste tyres (where 50 per cent or more of the waste is recovered) with thresholds of more than 5 tonnes (or 500 tyres) on site at any time (other than in waste transport vehicles parked at site) or more than 5000 Tonnes per year; and
- storage of waste from offsite (including transferring waste) (except stormwater, sewage in a treatment system and less than 60 Tonnes of drilling mud, grease trap waste, lead acid batteries or waste oil) with thresholds of 1000 tonnes (or 1000 cubic metres) of general waste on site at any time or 6000 tonnes (or 6000 cubic metres) per year; or 5 tonnes of hazardous, restricted, liquid or problem waste (other than tyres) at any time; or 5 tonnes of waste tyres or 500 tyres at any time (other than those in a vehicle parked on site).