

Design Guide for Container Recycling Equipment and Facilities under the NSW Container Deposit Scheme



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## **Summary**

The NSW Government introduced the *Waste Avoidance and Resource Recovery Amendment (Container Deposit Scheme) Act 2016* to meet the Premier's Priority for a 40% reduction in the volume of waste.

The Act established the Container Deposit Scheme (the Scheme) to reduce litter and recover, reuse and recycle drink containers. The Scheme allows anyone who returns an empty eligible beverage container to an approved NSW collection point to gain a 10-cent refund.

To support the rollout of the Scheme, the Department of Planning and Environment has amended the *State Environment Planning Policy (Exempt and Complying Development Codes) 2008* (the Codes SEPP) to assist in streamlining the planning and approval processes for recycling equipment and recycling facilities.

Under the Codes SEPP:

- low impact container recycling equipment will be classified as exempt development, that is, no planning or building approval will be required
- low impact recycling facilities will be classified as complying development, that is, fast tracked approval, subject to an accredited certifier issuing a complying development certificate.

Reverse vending machines (RVMs), mobile RVMs, and container collection cages will be classified as exempt development, provided all the relevant development standards in the Codes SEPP are met.

In addition, a range of container recycling facilities will be allowed as complying development. These include large RVMs, encased automatic machines, outdoor express centres, drop off collection points, manual collection points and automated counting and sorting centres.

This Design Guide has been prepared to:

- support these changes to the SEPP
- guide the appropriate installation of recycling equipment and facilities as collection points under the Container Deposit Scheme
- ensure that recycling equipment and facilities are deployed and sited according to best practice; are convenient to use; are accessible and safe; and do not negatively impact on the environment or visual character of their location.

To ensure the location of recycling equipment and facilities is appropriate, this Design Guide:

- sets out proposed design and operational requirements to ensure that recycling equipment and facilities do not visually impact on the nominated locations
- considers locations that are appropriate for installing the recycling equipment and facilities
- explains where to place the recycling equipment and facilities so they do not conflict with the predominant land use
- documents safety considerations to ensure that the recycling equipment and facilities
  do not affect vehicle and traffic movements, pedestrian movements or safety in public
  spaces

• addresses operational and environmental management requirements to protect public health and the environment.

The Design Guide outlines a set of best practice requirements for siting and establishing recycling equipment as exempt development, or recycling facilities as complying development, under the Codes SEPP. Landowner consent is required to install any fixtures on private or public land. and owners' consent from the local council or relevant public authority is required if the recycling equipment is placed on public land. The Design Guide also highlights additional considerations for larger collection and sorting infrastructure, such as existing planning approvals and licensing that may be required to receive, store and process containers.

By following this Design Guide, recycling equipment and facilities can be:

- implemented in a streamlined manner
- in line with best practice
- in locations that are valued and well used by the community.

## 1. Introduction to the NSW Container Deposit Scheme

#### **Background**

The Container Deposit Scheme (the Scheme) is being implemented under the *Waste Avoidance and Resource Recovery Act 2001*. The Scheme will involve installing a network of collection points for empty eligible containers, such as:

- reverse vending machines (RVMs)
- other forms of low impact collection infrastructure such as container collection cages and mobile RVMs.

These collection points will be coordinated regionally by Network Operators and managed locally by Collection Point Operators.

The NSW EPA sought assistance from the NSW Department of Planning and Environment (DPE) to modify the Codes SEPP in relation to planning considerations for collection points.

Following consultation between the DPE and the NSW EPA, changes to the Codes SEPP were placed on public exhibition. The proposed amendments to the Codes SEPP include the following key changes:

- · amendments to make recycling equipment exempt development
- providing an efficient way for collection points to support the Scheme
- removing obstacles and cutting red tape to deliver the Scheme across NSW.

The Design Guide will help Network Operators and Collection Point Operators to situate and install collection points efficiently, as long as the Operators' facilities comply with the relevant development standards set out in the Codes SEPP and best practice requirements in this Design Guide.

# State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (the Codes SEPP) covers a range of low impact development (exempt development). These can proceed without council approval under Part 4 of the Environmental Planning and Assessment Act 1979. Exempt development may be carried out without the need to obtain planning or building approval, subject to meeting the specified development standards prescribed in the Codes SEPP. The Codes SEPP also allows for a range of low impact development that can be carried out under a fast-tracked approval pathway (complying development). Such development is subject to an accredited certifier issuing a complying development certificate (CDC) stating that the proposal complies with all relevant development standards prescribed in the Codes SEPP.

The Codes SEPP and this Design Guide use the term 'collection point' as defined in the Waste Avoidance and Resource Recovery Act 2001. The SEPP and Design Guide broadly categorise exempt development as 'collection recycling equipment' and complying development as 'container recycling facilities'.

The sections of the Codes SEPP that are relevant to this Design Guide include:

- Part 2 Exempt Development Codes
- Part 5 Commercial and Industrial Alterations Code
- Part 5A Commercial and Industrial (New Buildings and Additions) Code.

The proposed amendment includes minor changes to Part 2, Division 1 – General Exempt Development Code of the Codes SEPP to include a new exempt category for recycling

equipment. The exempt category will allow the following recycling equipment to be exempt development:

- reverse vending machines
- mobile reverse vending machines
- · container collection cages.

The proposed amendment also includes minor changes to Part 5 and Part 5a of the Codes SEPP to include a new complying category for collection points. The complying category will allow the following collection points as complying development:

- encased automatic machines (existing and new built structure)
- large reverse vending machines
- outdoor express centres
- drop off collection points
- manual collection points
- automated counting and sorting centres.

## 2. Purpose of the Design Guide

The purpose of the Design Guide is to:

- assist Network Operators and Collection Point Operators under the Scheme to appropriately situate and install recycling equipment, according to best practice
- ensure that the recycling equipment is convenient, accessible and safe, and does not negatively impact on the environment or visual character of its location.

#### This Design Guide

- supports changes to the Codes SEPP to allow various types of recycling equipment to be exempt development
- intends that if a Network Operator and Collection Point Operator comply with the
  development standards of the Codes SEPP and these Design Guidelines, the installation
  will be considered to be exempt development under the *Environmental Planning and*Assessment Act 1979 and development consent will not be required
- sets out proposed design requirements to ensure that recycling equipment does not visually impact on the nominated locations
- considers locations that are considered appropriate for the individual recycling equipment type
- explains where to situate recycling equipment so it does not conflict with the predominant land use
- documents safety considerations to ensure that recycling equipment does not affect vehicle and traffic movements, or pedestrian movements and safety in public spaces.

Whilst the Design Guide outlines best practice requirements for siting and establishing locations for recycling equipment so it will be exempt under the Codes SEPP, landowner consent will also be required.

Proponents using this Design Guide may also require approvals under the *Roads Act 1993* or the *Local Government Act 1993*. Landowners' consent will also be required.

## 3. How to use the Design Guide

This Design Guide sets out

- minimum best practice design criteria for situating and installing recycling equipment
- operating and environmental management principles to ensure that the locations of the recycling equipment are well maintained, provide a reliable facility for the collection of empty drink containers and do not impact on the environment, public health or safety.

All illustrations in this Design Guide are examples only. The intent is to guide the expected look and feel of collection points. However, proponents must adhere to the specifications and development standards listed on the drawings.

This Design Guide covers the types of development which are exempt development if they comply with the Codes SEPP. These include:

- reverse vending machines
- mobile reverse vending machines
- container collection cages

This Design Guide covers the types of development which are complying development if they comply with the Codes SEPP. These comprise:

- encased automatic machines (existing and new built structure)
- larger RVMs
- outdoor express centres
- drop off collection points
- manual collection points
- automated counting and sorting centres.

Compliance with the Design Guide will be noted in the Codes SEPP, so Network Operators and Collection Point Operators must use the Design Guide when installing recycling equipment or recycling facilities at a given location.

The Design Guide provides guidance on the following siting, operational and management requirements:

- how the recycling equipment will be designed and promote good design so it is not visually detracting from the nominated location
- locations considered appropriate for the individual recycling equipment type
- how to situate the recycling equipment so it does not conflict with the predominant land use
- ways of situating and locating the recycling equipment for users so there is no conflict with vehicles
- how to locate recycling equipment in a public place or on footpaths
- operational and environmental management to protect public health and the environment.

Sample site plans and diagrams are provided demonstrating good design for recycling equipment. Please note these are examples only and may not be appropriate in all locations. Proponents should review each site and detail, assess appropriate types of recycling equipment and consider the requirements as outlined in this Design Guide.

## How to seek further guidance

For further advice regarding the Design Guide, please contact the NSW EPA's Container Deposit Scheme Implementation Team:

• Email: <a href="mailto:container.deposit@epa.nsw.gov.au">container.deposit@epa.nsw.gov.au</a>

Website: http://www.epa.nsw.gov.au/waste/container-deposit-scheme.htm

# 4. General siting and design requirements for exempt development

Amendments to the Codes SEPP specify the following development standards for **exempt development**, these include, RVMs, Mobile RVMs, and Container Collection Cages.

- (1) The standards specified for that development are that:
- (a) the container recycling equipment must not restrict any vehicular or pedestrian access to or from, or entry to any building on, the land on which the equipment is located, and
- (b) the container recycling equipment must not obstruct the operation of, or access to, any utility services on the land on which the equipment is located or on adjacent land, and
- (c) the container recycling equipment must, if erected outdoors:
- (i) be constructed of material that protects the equipment from weathering, and
- (ii) be painted or treated to protect the equipment from weathering, and
- (iii) in the case of a reverse vending machine or mobile reverse vending machine—be constructed so that any opening created is adequately weather proofed, and
- (d) the container recycling equipment must be constructed of low reflective materials, and
- (e) the container recycling equipment must be provided with lighting that complies with AS/NZS 1158.3.1:2005 *Lighting for roads and public spaces, Part 3.1: Pedestrian area (Category P) lighting—Performance and design requirements*, and
- (f) the container recycling equipment must not redirect the flow of any surface water or groundwater or cause sediment to be transported onto an adjoining property, and
- (g) the container recycling equipment must not:
- (i) emit noise at a level that is more than 70 dB(A), measured in accordance with the Noise Policy, or
- (ii) emit noise that is audible within residential or office premises on any lot adjoining the lot on which the equipment is located, or
- (iii) emit noise at a level that is more than 5 dB(A) above background noise when measured at any adjoining property boundary in accordance with the Noise Policy, and
- (h) any display screen affixed externally to the container recycling equipment must not be more than 50cm in length or 30cm in width, and
- (i) the development must not result in any damage to public property on the land on which the container recycling equipment is located or on adjacent land (except any damage resulting from securing or affixing the container recycling equipment to the ground as a safety measure), and
- (j) the development must not cause the contravention of any condition of a development consent that is in force relating to car parking, loading, vehicular movement, waste management or landscaping, and
- (k) arrangements must be made for the removal of waste or recyclable materials likely to be generated as a result of the development or the operation of the container recycling equipment, and
- (I) the siting, design and construction of the container recycling equipment must meet all of the requirements imposed by the Environment Protection Authority under the container deposit scheme, and
- (m) the container recycling equipment must not display any signage other than signage approved by the Environment Protection Authority under the container deposit scheme, and

- (n) if the container recycling equipment is located in a car park—the area occupied by the equipment must not exceed the greater of the following areas:
- (i) the area comprising 3 car parking spaces,
- (ii) 42m2, and
- (o) if it is the erection of a reverse vending machine—the machine must:
- (i) not have a floor area of more than 50m2, and
- (ii) not be more than 3m in height, 10m in width or 5m in depth, and
- (iii) not be erected within 5m of any residential premises, and
- (p) if it is the erection of a reverse vending machine or a container collection cage—the machine or cage must not be erected within 2m of any street or right of way, and
- (q) if it is the erection of a container collection cage—the cage must:
- (i) be located in a car park or commercial premises, and
- (ii) not have a floor area of more than 15m2, and
- (iii) not be more than 3m in height, and
- (r) if it is the erection or operation of a mobile reverse vending machine in connection with a commercial, community or retail event or a private function—the machine must not be parked or located:
- (i) on the land for more than 2 days before the event or for more than 2 days after the event, or
- (ii) within 2m of any street intersection or right of way, and
- (s) if it is the erection or operation of a mobile reverse vending machine in connection with a commercial or retail event—the reverse vending machine contained in the mobile reverse vending machine must operate only:
- (i) between 7.00 am and 11.00 pm on a Monday, Tuesday,

Wednesday or Thursday, and

- (ii) between 7.00 am and 12.00 am on a Friday or Saturday, and
- (iii) between 8.00 am and 8.00 pm on a Sunday.
- (2) Despite subclause (1) (n), the equipment may occupy an additional car parking area in addition to the area specified in that paragraph if:
- (a) an environmental planning instrument, development control plan or condition of a development consent that is in force requires the car park to provide a minimum number of car parking spaces, and
- (b) the car park provides a number of car parking spaces that exceeds the minimum number required (*the additional spaces*).
- (3) The *additional car parking area* is the greater of the following areas:
- (a) an area comprising not more than 3 of the additional spaces,
- (b) an area not exceeding 42m2.

**Note.** A structure on public land or on or over a public road requires the prior approval of the relevant authority under the *Local Government Act 1993* or the *Roads Act 1993*, respectively.

## 5. Siting and design criteria- reverse vending machines

A reverse vending machine (RVM), in its simplest form, is a device that accepts empty beverage containers and returns a reward (either money or some other payment method) to the user. The user inserts the empty beverage container into the RVM where it is scanned, identified and determined to be an eligible container.

This section provides additional siting and design requirements for RVMs, in addition to those listed in section 4.

#### Siting criteria

RVMs can be accommodated in a range of locations. However, they need to be situated and installed where they do not conflict with the predominant land use. A RVM:

- requires a tamper-proof and weatherproof electrical connection to power and operate the unit
- must be erected on a surface that is sufficiently firm and level to sustain it while in use
- needs an electricity connection that complies with the requirements of AS/NZS 3000:2007 Electrical installations.
- must be situated so access to and use of the site comply with the Disability (Access to Premises - Buildings) Standards 2010
- must be sufficiently illuminated to ensure safe operation at all times
- must have the consent in writing of the owner of the land on which the development is carried out must be obtained or, for public land, the council or public authority
- must be completely located on a lot or in a road reserve and not be located on a road when a RVM is placed in a road reserve, local council approval is required under Section 138 of the *Roads Act 1993* (as a temporary structure).

## **Design criteria**

RVMs should enable the easy, efficient and accurate receipt, processing of containers and the issue of refunds in an outdoor or indoor environment. The following visual design criteria must be addressed in siting, configuring and installing RVMs:

- The unit should be made of durable and weatherproof materials.
- The unit must only be branded with logos, signage, branding and messaging that are approved for use by the NSW Government.
- The unit must be positioned so it is not visually distracting, particularly to motorists.
- Displays can include static and active visualisations which explain how the Container Deposit Scheme works or how to use the infrastructure, and be covered (if outdoors).

A good example of a visual design that complements the existing environment is given in Figure 1. The RVM has been installed in a food court with high pedestrian traffic. Note that the units are sealed and weatherproof and have approved scheme signage to blend with the existing commercial environment. The unit has been safely positioned to avoid obstructing pedestrian access.

CONTRIBUTION CONTRIBUTION POINT

Figure 1. Example of a well-designed RVM in a food court

#### **Appropriate installation locations**

Minimum construction is required for RVMs. These types of recycling equipment can be situated in a wide range of environments, provided there is sufficient space. They are best installed in public spaces where pedestrians can access them for mainly depositing single eligible containers.

The following locations are considered appropriate for the installation of RVMs:

- public transport facilities such as train stations, bus interchanges, ferry terminals and bus shelters
- educational establishments including TAFEs, universities and schools
- parks and nature reserves, including national parks, picnic areas and barbecue areas
- retail premises such as supermarkets, shopping malls, wholesale retailers and retail parking lots
- major multi-storey parking lots adjacent to main pedestrian exits.

RVMs must not be installed in environmentally sensitive areas.

A siting guide for RVMs has been provided in Figure 2. This example shows a unit located in a shopping centre food court. The RVM is positioned away from the entry of the businesses and eating areas where it will not impact on pedestrian flow. Note the RVM has been installed against a building column and planter boxes to reduce visual impacts and improve safety.

SUFFICIENT ACCESS COUNTER COUNTER POSITIONING TO AVOID BUILDING PLANTER PLANTER IMPACTS ON PEDESTRIAN COLUMN MAX. 5M **ELECTRICAL CONNECTION TO** UNIT TO COMPLY WITH AS/NZS <3M HIGH 3000-2007 RETAIL TENANCIES/FOOD OUTLETS TENANCIES/FOOD OUTLETS P 608 108 0 COUNTER COUNTER WALKWAY WALKWAY BENCH SEATING COUNTER COUNTER 0m 1m

Figure 2. Siting guide for RVMs

#### **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when installing and operating RVMs. Regular servicing, maintenance and cleaning is required to ensure RVMs are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter. The RVM should:

- Only accept the waste types approved by the Container Deposit Scheme. It is prohibited
  to use the machine to collect other wastes such as solid wastes or hazardous wastes .;
- Store all deposited material in each machine, not outside the machine.
- Maintain the machine in a clean, safe and sanitary condition and keep it free of litter, loose debris and pests.
- Design the system so any potential leachate is captured, removed from the RVM regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain.
- Do not redirect the flow of any surface water or groundwater, or cause sediment to be transported, onto an adjoining property.
- The system should be free from dust, fumes or odours.
- The system should not interfere with the functioning of existing drainage fixtures.

It is preferable that the units are installed near an existing general waste litter bin to prevent litter, and to dispose of containers that have not been accepted by the machine.

# 6. Siting and design criteria – mobile reverse vending machines

A mobile reverse vending machine (mobile RVM) is a mobile vehicle or movable structure that is designed to accept recyclable materials. Mobile units are designed to be readily moved to different temporary locations, that is, they are not fixed.

This section provides additional siting and design requirements for mobile RVMs, in addition to those listed in sections 4 and 5.

#### Siting criteria

The following minimum building standards apply to installing a mobile RVM. The unit:

- must not occupy more than 30 m<sup>2</sup> of floor area
- must not be more than 3 metres high
- must be no more than 3 metres wide and 10 metres long;
- must be erected on a surface that is sufficiently firm and level to sustain it while in use
- needs an electricity connection that complies with the requirements of AS/NZS 3000:2007 - Electrical installations.
- must comply with the Disability (Access to Premises Buildings) Standards 2010
- must be sufficiently illuminated to ensure safe operation at all times
- must have the consent in writing of the owner of the land on which the development is carried out or, if it is in a public space, the consent in writing of the council or public authority
- must be wholly located on the lot or in the road reserve and not be located on a road –
  when the RVM is in a road reserve, local council approval is required under Section 138
  of the Roads Act 1993 (as a temporary structure);
- must be unhitched from the vehicle used for towing this vehicle must be parked in an approved parking space or along the curb with consideration to local restrictions
- must be in a clearly marked area to prohibit other vehicular parking during hours when the mobile unit is scheduled to be present.

## **Design criteria**

Mobile RVMs should enable the easy, efficient and accurate receipt, processing and issue of refunds in an outdoor environment. The following visual design considerations need to be addressed when situating, configuring and installing mobile RVMs:

- the unit should be made of durable and weatherproof materials
- the unit must only be branded with logos, signage, branding and messaging that are approved for use by the NSW Government
- units should be positioned so they are not visually distracting, particularly to motorists
- displays can include static and active visualisations explaining how the Scheme works or how to use the infrastructure, and should be covered if outdoors.

A good example of a visual design of a mobile RVM is given in Figure 3. This mobile RVM has a durable and weatherproof design. This mobile RVM can be installed in a variety of locations and not detract from the local visual amenity of the surrounding environment.

Users deposit containers on the side of the RVM. An awning over the deposit point provides weather protection to reduce slip hazards in wet weather. This unit has been designed for use in public areas associated with special events.

Figure 3. Example of a well-designed mobile RVM.



#### **Appropriate installation locations**

Mobile RVMs can be positioned discretely in a range of locations due to their mobile nature. Placement is only limited by access for the towing vehicle and trailer, and availability of electrical power.

Mobile RVMs are trailer mounted and towed by a vehicle. They must be positioned with consideration to access for both vehicle and trailer. In addition, they must be positioned to allow for sufficient pedestrian access and queuing during an event to ensure the safety of consumers is maintained.

They are best installed in areas where pedestrians can access them to deposit eligible bottles and cans in public spaces or during events.

The following locations are considered appropriate for mobile RVMs:

- community events
- public transport facilities
- educational establishments, including TAFEs, universities and, potentially, schools
- parks and nature reserves, including national parks
- retail premises
- industrial-zoned land, for example, co-located with a materials recovery facility, waste transfer station or community recycling centre.

Mobile RVMs must not be installed in an environmentally sensitive area.

A siting example for a mobile RVM at a special event is given in Figure 4. The unit is positioned where it will not impact on pedestrian flow and is at least two metres from a public right-of-way.

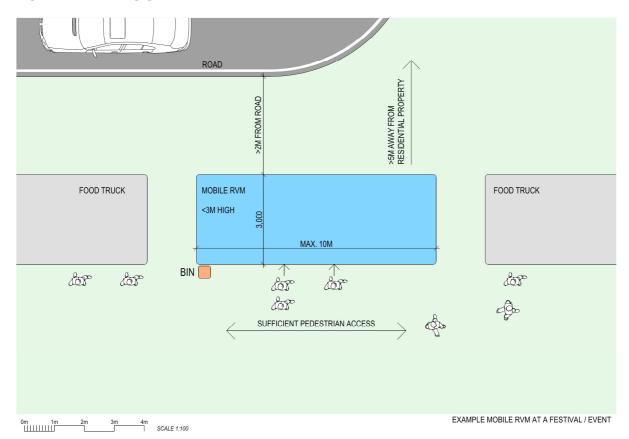


Figure 4. Siting guide for a mobile RVM

#### **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when operating a mobile RVM unit. Regular servicing, maintenance and cleaning are required to ensure mobile RVMs are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter.

- Only accept the waste types approved by the Container Deposit Scheme. It is prohibited to collect other wastes such as solid wastes or hazardous wastes in mobile RVMs.
- Store all deposited material in each machine and do not leave materials outside the machine.
- Maintain the mobile RVM in a clean, safe and sanitary condition and keep it free of litter, loose debris and pests.
- Ensure the mobile RVM is constructed to capture any potential leachate, which must be removed from the RVM regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain.
- Do not redirect the flow of any surface water or groundwater, or cause sediment to be transported, onto an adjoining property.
- Ensure the mobile RVM is free from dust, fumes or odours.
- Ensure the mobile RVM does not impede the functioning of existing drainage fixtures.

It is preferable that the units are installed near an existing litter bin that may be used to prevent litter.

## 7. Siting and design criteria – container collection cages

Container collection cages are holding cages or structures that store drink containers for recycling, and are manufactured in a range of sizes, meaning different sizes are suitable for different locations. Container collection cages may be found in a retail store such as a charity shop. Containers may be temporarily stored in a smaller cage and then moved to a larger container collection cage or structure outside the retail building, while they await collection.

This section provides additional siting and design requirements for container collection cages, in addition to those listed in section 4.

#### Siting criteria

The unit

- must not occupy more than 15 m2 of floor area.
- must not be more than 3 metres high
- must be erected on a surface that is sufficiently firm and level to sustain it while in use.
- have an electricity connection that complies with the requirements of AS/NZS 3000:2007
   Electrical installations
- must comply with the *Disability (Access to Premises Buildings) Standards 2010*, and must be sufficiently illuminated to ensure safe operation at all times must have the consent in writing of the owner of the land on which the development is carried out or, if it is in a public space, the consent in writing of the council or public authority
- must be wholly located on the lot or in the road reserve and not be located on a road –
  when the RVM is in a road reserve, local council approval is required under Section 138
  of the Roads Act 1993 (as a temporary structure);

#### **Design criteria**

Container collection cages should enable the easy, efficient and accurate receipt and processing of containers and issue of a refund in an outdoor or indoor environment. The following visual design considerations need to be addressed in situating, configuring and installing collection cages:

- the unit should be made of durable and weatherproof material
- the unit must only be branded with logos, signage and branding that are approved for use by the NSW Government
- the unit must be positioned so it is not visually distracting, particularly to motorists
- displays should be covered if outdoors, and can include static and active visualisations which explain how the Scheme works or how to use the infrastructure.

A good example of a visual design that complements an existing environment is given in Figure 5. This collection cage has been constructed from durable, low-reflective and weatherproof materials.

Figure 5. Example of a well-designed collection cage.



#### **Appropriate installation locations**

Container collection cages can be positioned discretely in a range of locations due to the mobile nature of the cages and the various sizes available. Placement is only limited to access by the collection vehicle. Container collection cages are to be positioned with consideration to vehicle access.

Container collection cages are best installed in areas where pedestrians can access them for depositing large volumes of eligible bottles and cans in public spaces or during events.

The following locations are considered appropriate for the installation of container collection cages:

- car park area of a commercial property
- in a commercial premises
- car park area of an education establishment or community facilities
- car park area of industrial-zoned land (e.g. co-located with a materials recovery facility, waste transfer station or community recycling centre).

Collection cages must not be installed in an environmentally sensitive area.

A siting guide example for a container collection cage is given in Figure 6. Note that the container collection cage is located in a car park at the rear of a retail shop. The container collection cage is located in the shop and is used for depositing collected containers by the shop owner. The cage is positioned so it has sufficient clearance for safe vehicular movement around the cage.

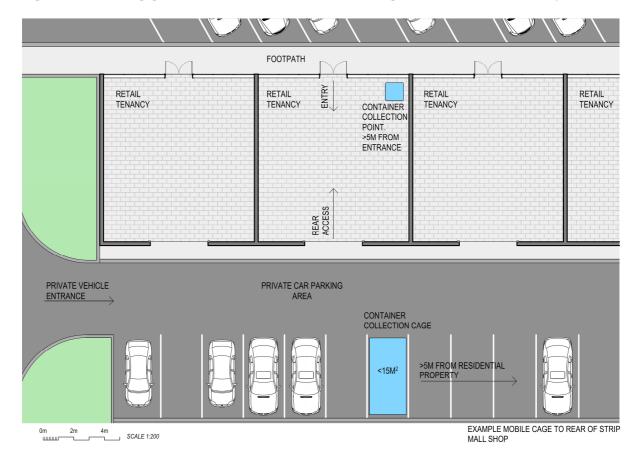


Figure 6. Siting guide for a container collection cage within a retail tenancy

#### **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when operating collection cages. Regular servicing, maintenance and cleaning are required to ensure container collection cages are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter.

- Only accept the waste types approved by the Container Deposit Scheme. Using the units to collect other wastes such as solid wastes or hazardous wastes is prohibited.
- Store all deposited materials and do not leave them outside the cage.
- Maintain the collection cage in a clean, safe and sanitary condition and keep it free of litter, loose debris and pests.
- Ensure the collection cage is constructed to capture any potential leachate, which must be removed from the cage regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain.
- Do not redirect the flow of any surface water or groundwater, or cause sediment to be transported, onto an adjoining property.
- Cages should be emptied weekly or more frequently if usage is likely to exceed the cage capacity. The appropriate collection vehicle should be used for the type and size of the mobile cage.
- Ensure the collection cage is free from dust, fumes or odours.
- Ensure the collection cage does not impede the functioning of existing drainage fixtures or flow paths.

Design guide for container recycling equipment and facilities under the NSW Container Deposit Scheme

It is preferable that the units are installed near an existing litter bin that may be used to prevent litter.

# 8. General collection point siting and design requirements for complying development

Amendments to the Codes SEPP specify development standards for container recycling facilities and collection points under complying development, including:

- enclosed automatic machines in an existing and new built structure
- a large reverse vending machine
- an outdoor express centre
- a drop off collection point
- · a manual collection point
- an automated collection and sorting centre.

These standards are in addition to other development standards specified in the Codes SEPP.

The following standards apply to the development.

- (1) If the development is for the purposes of an encased automatic machine, a large reverse vending machine, an outdoor express centre or a drop-off collection point, on land in a car park:
- (a) the container recycling facility must be located to allow adequate clearance for waste collection vehicles to enter and exit the car park for the collection of waste from the facility, and
- (b) the container recycling facility must not be erected within 5m of any residential premises, and
- (c) containers deposited under the container deposit scheme must be dispatched from the container recycling facility for reuse or recycling only during the following periods:
- (i) between 7.00 am and 5.00 pm on Monday, Tuesday, Wednesday,

Thursday, Friday or Saturday,

- (ii) between 9.00 am and 5.00 pm on Sunday.
- (2) If the development is for the purposes of an encased automatic machine, a large reverse vending machine, an outdoor express centre or a drop-off collection point, on land in a car park—the area occupied by the container recycling facility must not exceed the greater of the following areas:
- (a) the area comprising 3 car parking spaces,
- (b) 42m<sub>2</sub>.
- (3) If the development is for the purposes of a drop-off collection centre, the centre must not have a floor area of more than 300m<sub>2</sub>.
- (4) If the development is for the purposes of an encased automatic machine, the machine must not be more than 15m in height, 10m in width or 25m in length.
- (5) If the development is for the purposes of an outdoor express centre:
- (a) the centre must operate only during the lawful operating hours of the commercial premises, and
- (b) the centre must not have a floor area of more than 40m2, and
- (c) the centre must not be more than 3m in height, 3m in width or 6.5m in length.

- (6) Despite subclause (2), the container recycling facility may occupy an additional car parking area in addition to the area specified in that subclause if:
- (a) an environmental planning instrument, development control plan or condition of a development consent that is in force requires the car park to provide a minimum number of car parking spaces, and
- (b) the car park provides a number of car parking spaces that exceeds the minimum number required (*the additional spaces*).
- (7) The *additional car parking area* is the greater of the following areas:
- (a) an area comprising not more than 3 of the additional spaces,
- (b) an area not exceeding 42m2.
- (8) The development standards set out in subclauses (1)–(5) prevail to the extent of any inconsistency with the development standards referred to in clause 5B.5.

# 9 Siting and design criteria – Encased automatic machines within an existing structure such as a retail outlet

Encased automatic machines may occupy a shop or internal area that has a 'back-of-house' installed in a dock or secure enclosure to:

- · contain the sorting line
- allow access to and servicing of the machines
- remove collected containers.

The 'back-of-house' should only be accessed by authorised personnel.

Containers are deposited via the user interface section of the automatic machine. The accepted deposited container is processed inside the machine and onto a conveyor belt (or similar) in the back-of-house. Automatic machines with back end sorting systems can be configured differently depending on the shop or dock space environment available.

This section provides additional siting and design requirements for encased automatic machines, in addition to those listed in section 8.

#### Siting criteria

The following minimum siting standards apply to the installation of automatic machines in a building, in addition to those in section 8.

- The unit must not result in an increase in the gross floor area of the building.
- The unit must not reduce vehicular access to, parking on or loading or unloading on or from, the premises.
- If the alteration involves a loading dock, the alteration must not:
  - reduce the area for goods handling
- reduce the area for waste handling (including any recycling area)
- The unit must not be more than 3 metres high or 10 metres wide or 25 metres in length
- The unit must be established in conjunction with an existing commercial or industrial use which complies with the relevant zoning, building and fire codes.
- The electricity connection must comply with the requirements of AS/NZS 3000:2007 -Electrical installations.
- The unit must have the consent in writing of the owner of the land on which the development is carried out or, if it is in a public space, the consent in writing of the council or public authority.
- The unit must be secured from unauthorised entry and removal of materials.
- The unit must not obstruct pedestrian traffic to force pedestrians onto the road or into any other unsafe situation.
- The unit must not obstruct vehicular traffic circulation that results in interrupting the flow of traffic, causing blockages, delays in traffic or other dangerous situations for motorists.
- Access and use of the site must comply with the Disability (Access to Premises -Buildings) Standards 2010.
- The site must be sufficiently illuminated to ensure safe operation at all times.

#### **Design criteria**

Encased automatic machines should enable the easy, efficient and accurate receipt, processing and issue of refunds indoors t. The following visual design considerations need to be addressed in situating, configuring and installing encased automatic machines with back end sorting systems in an existing building

#### Front end

- The unit should be made of durable and weatherproof materials.
- The unit should be constructed with low-reflective materials.
- The unit must only be branded with logos, signage and branding that are approved for use by the NSW Government.
- The unit must be positioned and designed to avoid impacts on the visual amenity of surrounding land.
- The dimensions of display screens used for instructions and scheme messaging must not be greater than 50 cm x 30 cm to avoid impacts on visual amenity.
- Displays can include static and active visualisations to provide instructions on the use of the automatic machine as well and the Container Deposit Scheme.
- If the unit is outside, it must be covered.

#### **Back of house**

• The unit should be fully enclosed in a secured enclosure, not visible from the front end and accessible by authorised personnel only.

Figure 7. Example of a well-designed encased automatic machine within an existing retail outlet.



## **Appropriate installation locations**

Enclosed automatic machines must be established in conjunction with an existing commercial use which complies with the relevant zoning, building and fire codes. The current use of the premises must be lawful.

Encased automatic machines are best installed in areas where pedestrians can access them for depositing large volumes of eligible containers. The following locations are considered appropriate for the installation of encased automatic machines:

- public transport facilities such as train stations, bus interchanges, ferry terminals and bus shelters
- educational establishments including TAFEs, universities and schools
- retail premises such as supermarkets, shopping malls, wholesale retailers and retail parking lots
- industrial-zoned land, for example, an area co-located with a materials recovery facility, waste transfer station or community recycling centre.

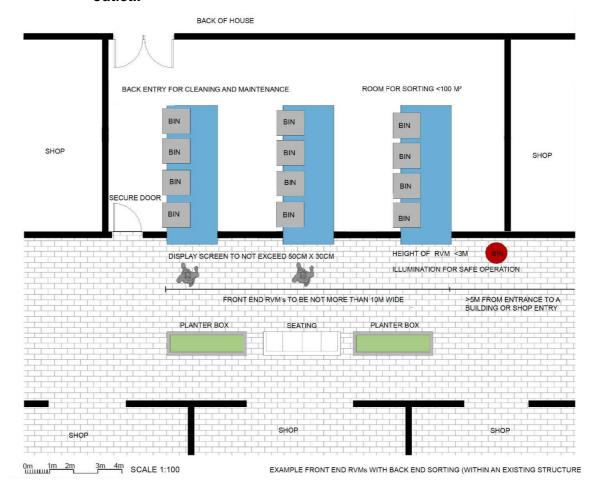
#### **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with. Machines must be regularly serviced, maintained and cleaned to ensure they are continually available to serve the needs of the community, prevent leaks from drink container contents that could run off into stormwater, and prevent litter. The infrastructure must:

- only accept the waste types approved by the Container Deposit Scheme –it is prohibited to use the systems for collecting other wastes such as solid or hazardous wastes
- · store all deposited materials in the back-of-house end of the system
- be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests
- be constructed so any potential leachate is captured, removed from the automated machine regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain
- be emptied weekly or more frequently if usage is likely to exceed the system's capacity the appropriate collection vehicle should be used for the type and size of the system
- be free from dust, fumes or odours
- not contravene any existing condition of the most recent development consent that applies to the premises relating to hours of operation, noise, car parking, loading, vehicular movement, traffic generation, waste management or landscaping
- not be audible beyond the boundary of the premises on which the machine is situated and not exceed the background noise level by more than 5 dB as measured at the property line of any residential or professional premises – noise assessment must be made in accordance with the NSW Industrial Noise Policy (visit www.epa.nsw.gov.au/noise/industrial.htm) and other relevant noise assessment techniques and guidelines if compliance with this requirement needs to be demonstrated
- not exceed a noise level of 70 dBA in any event.

It is preferable that litter bins are provided near the system that may be used to prevent litter.

Figure 8 Siting guide for an encased automatic machine within an existing retail outlet..



# 10. Siting and design requirements – Encased automatic machines (within a new building structure)

Encased automatic machines in a purpose-built structure that has a 'back-of-house' installed. The back-of-house is enclosed and secure to contain the sorting line, and allow for access and servicing of the RVMs and removal of collected containers. The back-of-house should only be accessed by authorised personnel.

Containers are deposited via the user interface section of the encased automatic machine. The deposited container is processed inside the machine and and moved onto a conveyor belt (or similar) in the back-of-house.

Encased automatic machines are constructed within a structure and are typically designed for outdoor applications such as a retail shopping centre car park.

A new structure may include:

- the construction of a building for the purposes of an encased automatic machine
- an addition to an existing building to house an encased automatic machine
- altering the outside of an existing building to house an encased automatic machine
- modifying the rear of existing commercial premises to house an encased automatic machine
- altering the outside of an existing commercial building to house an encased automatic machine

This section provides additional siting and design criteria for encased automatic machines, in addition to those listed within section 8.

#### Siting criteria

- The unit must not reduce vehicular access to, parking on or loading or unloading on or from, the premises.
- The new structure containing the front end RVMs with back end sorting systems must not be more than 15 metres high, 10 metres wide and 25 metres long.
- Collection may only be carried out in car parks that have sufficient clearances to safely allow garbage trucks to enter and exit the site to collect deposited containers from the recycling equipment.
- Electricity connections to the unit must comply with the requirements of AS/NZS 3000:2007 Electrical installations.
- The unit must be set back at least 2 metres from any street or right of way.
- The unit must not be located within 5 metres of a building entry unless it can be demonstrated that its location will not interfere with pedestrian movement or access, or the safety of any neighbouring site or entry.
- Where a car park adjoins residential properties, the system must be situated at least 5 metres from any residential property.
- The unit must be established in conjunction with an existing lawful commercial, industrial or community service facility.
- The unit must have the consent in writing of the owner of the land on which the
  development is carried out or, if it is in a public space, the consent in writing of the
  council or public authority.

- The unit must be wholly located on the lot or in a road reserve and not located on a road.
- The unit must be secured from unauthorised entry or and removal of materials.
- The unit must not obstruct pedestrian traffic to force pedestrians onto the road or into any other unsafe situation.
- The unit must not obstruct vehicular traffic circulation that interrupts the flow of traffic, causes blockages, or delays traffic or other dangerous situations for motorists.
- The site's access and use must comply with the *Disability (Access to Premises Buildings) Standards* 2010.
- The site must be sufficiently illuminated to ensure safe operation at all times.

#### **Design criteria**

Encased automatic machines should enable the easy, efficient and accurate receipt, processing and issue of refunds. The following visual design considerations need to be addressed in situating, configuring and installing front end RVMs with back end sorting systems in new buildings.

#### Front end

- The unit should be made of durable, weatherproof and low-reflective materials.
- The unit must only be branded with logos, signage and branding that are approved for use by the NSW Government.
- The unit must be positioned and designed to avoid impacts on the visual amenity of surrounding land.
- The dimensions of display screens used for instructions and scheme messaging must not be greater than 50 cm x 30 cm to avoid impacts on visual amenity.
- Displays can include static and active visualisations to provide instructions on the use of the RVM and the Container Deposit Scheme.
- If outside, the unit must be covered.

#### **Back of house**

• The unit should be fully enclosed in a secured enclosure, not visible from the front end and accessible by authorised personnel only.

Figure 9. Example of a well-designed encased automatic machine in a new building structure



#### **Appropriate installation locations**

Enclosed automatic machines with back end sorting systems in new buildings can be established on any lot zoned B1, B2, B3, B5, B4, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3. These may also be installed in a car park in any other zone provided the car park is lawful. They are best installed in areas where pedestrians can access them to safely deposit large volumes of eligible containers.

## **Operating guidelines**

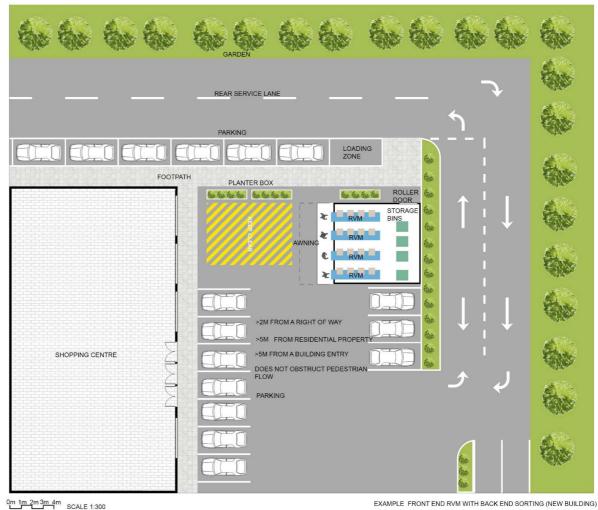
To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when operating front end RVMs with back end sorting. Units should be regularly serviced, maintained and cleaned to ensure they are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter:

- The machine must only accept waste types approved by the Container Deposit Scheme. It is prohibited to use the systems to collect other wastes such as solid or hazardous wastes.
- All deposited materials must be stored in the back-of-house end of the system.
- The machine must be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests.
- The machine must be constructed to capture any potential leachate, which must be removed from the automated machine regularly in a sealed waste container, disposed of lawfully and not tipped into the stormwater drain.
- The machine should be emptied weekly, or more frequently if usage is likely to exceed the system's capacity.
- Waste collection may only be carried out between 7:00 am and 7:00 pm Mondays to Fridays, between 7:00 am and 5:00 pm on Saturdays and between 9:00 am and 5:00 pm on Sundays.
- The appropriate collection vehicle should be used for the type and size of the system.

- The machine must be free from dust, fumes or odours.
- The machine must not contravene any existing condition of the most recent development consent that applies to the premises relating to hours of operation, noise, car parking, loading, vehicular movement, traffic generation, waste management or landscaping.
- Noise must not be audible beyond the boundary of the premises on which the machine
  is situated and not exceed the background noise level by more than 5 dB as measured
  at the property line of any residential or professional premises noise assessment must
  be made in accordance with the NSW Industrial Noise Policy (visit
  www.epa.nsw.gov.au/noise/industrial.htm) and other relevant noise assessment
  techniques and guidelines if compliance with this requirement needs to be
  demonstrated.
- The noise level should not exceed 70 dBA in any event.

It is preferable that the units are installed near a litter bin that may be used to prevent litter.

Figure 10. Siting guide for an encased automatic machine in a new building structure



# 11. Siting and design criteria – larger reverse vending machines

A larger reverse vending machine (RVM) has a floor area of more than 50 m² or is more than 3 m high, 10m wide or 5 m deep. A RVM which has dimensions exceeding these measurements must meet all the development standards in section 8 of this Design Guide and siting and design guidelines for RVMs in section 5.

## 12 Siting and design criteria – outdoor express centre

An outdoor express centre is an installation, typically the size of a shipping container, that is staffed and includes a 'back-of-house' enclosure for container collection and storage. A person managing the outdoor express centre will collect the container from and give a refund to the customer.

Outdoor express centres must be erected on a firm, level surface to sustain them while in use.

This section provides additional siting and design requirements for outdoor express centres, in addition to those listed in section 8.

#### Siting criteria

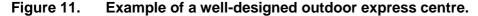
The following minimum building standards apply to the installation of outdoor express centres:

- they should not be more than 3 metres high
- Be erected on a surface that is sufficiently firm and level to sustain the structure while in use; and
- the electricity connection should comply with the requirements of AS/NZS 3000:2007 -Electrical installations
- they can be located in a car park if the car park is lawful and has appropriate development consent
- they can only be situated in car parks that have sufficient clearance to safely allow garbage trucks to enter and exit to collect and empty the unit
- they must not be located within 5 metres of a building entry unless they will not interfere with pedestrian movement or access, or the safety of any neighbouring site or entry
- they must be situated at least 5 metres from any residential property
- they must have the consent in writing of the owner of the land on which the development is carried out or, if it is in a public space, the consent in writing of the council or public authority
- they must be completely located on the lot or in the road reserve and not located on a road – if they are in a road reserve, local council approval is required under Section 138 of the Roads Act 1993 as a temporary structure
- vehicles used for transporting an outdoor express centre must be removed from the area and parked in an approved parking space or on the street curb with consideration to local restrictions
- they must not restrict any car parking provided by a condition of a development consent applying to the land or any vehicular or pedestrian access to or from the land unless that parking and access is on land owned, controlled or managed by a council or public authority, and that council or public authority has given its written consent to the temporary use of the land for the erection of the temporary structure
- they must be in a clearly marked area to prohibit other vehicular parking during hours when the outdoor express centre is present
- they must be secured from unauthorised entry or and removal of materials
- they must not obstruct pedestrian or vehicular traffic circulation
- access and use of the site must comply with the Disability (Access to Premises -Buildings) Standards 2010
- the site must be sufficiently illuminated to ensure safe operation at all times.

#### **Design criteria**

Outdoor express centres should enable the easy, efficient and accurate receipt, processing and issue of a refund in an outdoor or indoor environment. The following visual design considerations need to be addressed in situating, configuring and installing an outdoor express centre:

- the unit should be made of durable, low-reflective and weatherproof materials
- the unit must only be branded with logos, signage and branding that are approved for use by the NSW Government
- the unit must be positioned and designed to avoid impacts on visual amenity of surrounding land uses and distracting motorists including the use of bright or reflective colours, bold patterns or flashing lights
- the dimensions of display screens (used for instructions and scheme messaging) must not be greater than 50 cm x 30 cm to avoid impacts on visual amenity
- displays can include static and active visualisations to provide instructions on the use of the RVM and the Container Deposit Scheme
- the unit must be covered if outdoors.





## **Appropriate installation locations**

Outdoor express centres can be positioned discretely in a range of locations. Locations need to:

- provide access to the vehicle required to transport the infrastructure
- have an electricity connection
- provide access to other vehicles
- allow for sufficient pedestrian access and queuing to ensure the safety of consumers is maintained.

They are best installed in areas where pedestrians can access the units safely for depositing eligible containers in public spaces.

The following locations are considered appropriate for the installation of pop-up outdoor express centres:

- commercial property, for example, shopping centre car parks
- industrial-zoned land, for example, land co-located with a materials recovery facility, waste transfer station or community recycling centre).

Outdoor express centre must not be installed in an environmentally sensitive area.

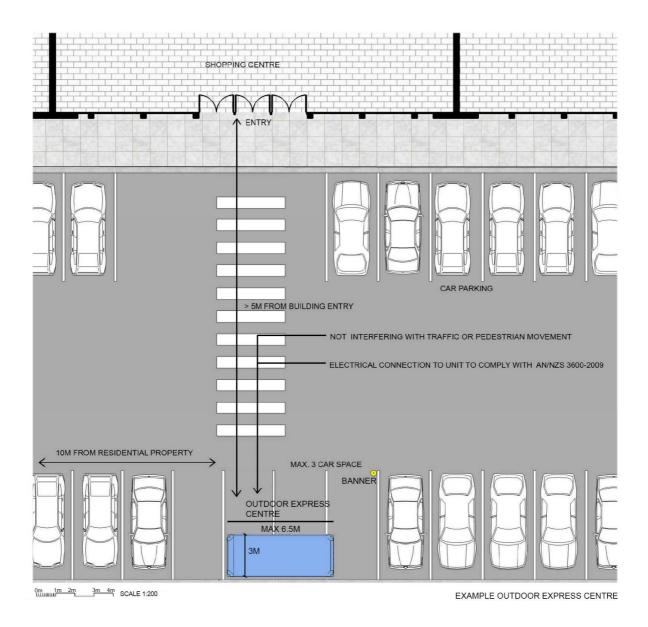
#### **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when operating a pop-up outdoor express centre. Regular servicing, maintenance and cleaning are required to ensure they are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter.

- Only accept the waste types approved by the Container Deposit Scheme. It is prohibited to use the systems to collect other wastes such as solid or hazardous wastes.
- Store all deposited material in the outdoor express centre, not outside.
- The system should be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests.
- The outdoor express centre must include a 'back-of-house' area for container collection and storage including sealed, lined bins or self-bunding to contain all potential leachate, that is, leaks from disposed containers containing residual liquid
- The outdoor express centre must be constructed so any potential leachate is captured, removed from the automated machine regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain.
- The system should not be located to redirect the flow of any surface water or groundwater, or cause sediment to be transported, onto an adjoining property.
- The system must be free from dust, fumes or odours.
- The system should not interfere with the functioning of existing drainage fixtures.
- The centre should not be audible beyond the boundary of the premises on which it is situated and should not exceed the background noise level by more than 5 dB as measured at the property line of any residential or commercial premise – noise assessment must be made in accordance with the NSW Industrial Noise Policy (visit www.epa.nsw.gov.au/noise/industrial.htm) and other relevant noise assessment techniques and guidelines if compliance with this requirement needs to be demonstrated.
- The system should not exceed a noise level of 70 dBA in any event.

It is preferable that the units are installed near a litter bin that may be used to prevent litter.

Figure 12. Siting guide for an outdoor express centre.



## 13 Siting and design criteria – Drop off collection points

A drop off collection point is a recycling facility with a minimum floor area of 300 m² where customers can drop off eligible containers individually or in assigned and identified bags or other containers. The drop off collection point is staffed and includes a 'back-of-house' for container collection and storage. Drop off collection points may include sorting and counting machines. A person supervising the drop off collection point will collect the container from and refund the customer. These types of collection points may also be appropriate for community recycling centres.

This section provides additional siting and design requirements for drop off collection points, in addition to those listed in section 8.

#### Siting criteria

- The following minimum building standards apply to drop off collection points:
- When located in an industrial zones, the total area of all buildings on the site must not be more than 20,000 m<sup>2</sup> have a height greater than 15m and have setbacks that comply with those setbacks specified under the existing clauses in the Codes SEPP
- the building must have a front door or entry with an awning or portico, or be distinguished
  by the use of different building materials, as part of the front facade wall of the building
  that faces the primary road or principal entry onto the site
- the facility should provide safe and orderly entry, all-weather access and a sufficient queuing area for vehicles using the facility so external traffic flows are not interrupted
- if appropriate, the facility should provide separate access from the public road network, for example, a turn-off or slip lane
- the facility should provide for the separation of cars, trucks and pedestrians
- electricity connections should comply with the requirements of AS/NZS 3000:2007 -Electrical installations
- the facility should be established in conjunction with an existing lawful industrial use
- the facility should have the consent in writing of the owner of the land on which the recycling equipment is installed, if it is on public land, the consent in writing of the council or public authority
- the facility should be wholly located on a lot or in a road reserve and not located on a road
- the facility should be secured from unauthorised entry and removal of materials
- the facility should not obstruct pedestrian traffic to force pedestrians onto the road or into any other unsafe situation
- the facility should not obstruct vehicular traffic circulation that results in interrupting the flow of traffic, or causing blockages, delays in traffic or other dangerous situations for motorists
- access and use of the site must comply with the Disability (Access to Premises -Buildings) Standards 2010

the site must be sufficiently illuminated to ensure safe operation at all times, have sufficient space for storage of collected containers, be equipped with fire control measures and be located on level hardstand areas

- the facility should be protected from the wind to prevent wind-blown litter
- the facility should have stormwater run-off diverted to appropriately management leachate
- stored, collected containers should be placed on a flat, impervious surface (preferably a concrete slab) and incorporate a bund (in accordance with Department of Environment and Climate Change NSW (2007) Storing and Handling Liquids: Environmental Protections, Participants Manual, published in May 2007) the bunded area should be of sufficient size to allow for storage of emptied containers and contain any spills
- stored, collected containers should be as far as possible away from stormwater drains.

#### Visual design

Drop off collection points are basic designs that allow for the receipt and storage of containers. The following visual design considerations need to be addressed in designing and siting drop off collection points:

- the front facade wall of a new industrial building must contain at least 30% of materials that are not the main exterior finish
- the building design must comply with the requirements in the Codes SEPP.

Figure 13. Example of a well-designed drop off collection point.



# **Appropriate installation locations**

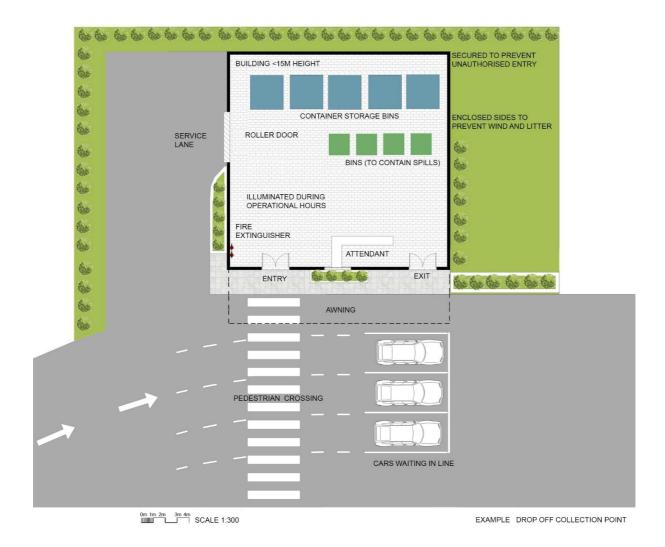
Drop off collection points can be established on any lot zoned IN1, IN2, IN3, IN4 or SP3 and may also be permitted in a business zone where they are ancillary to the lawful use of land only be carried out for the purpose of a collection point.

# **Operating guidelines**

To ensure that public health, safety and the environment are protected, a series of good operational and management criteria should be complied with when operating drop off collection points. Regular servicing, maintenance and cleaning are required to ensure the facilities are continually available to serve the needs of the community, prevent leaks of drink container contents that could run off into stormwater, and prevent litter:

- Only accept the waste types approved by the Container Deposit Scheme. It is prohibited
  to use the collection points for other wastes such as solid or hazardous wastes.
- Store and process all deposited materials in the back-of-house away from the customer accessible areas.
- The facility should be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests.
- The facility should be constructed so tany potential leachate is captured, removed from the automated machine regularly in a sealed waste container and disposed of lawfully, not tipped into the stormwater drain.
- The facility should be free from dust, fumes or odours.
- The facility should ust not contravene any existing condition of the most recent development consent that applies to the premises relating to hours of operation, noise, car parking, loading, vehicular movement, traffic generation, waste management or landscaping.
- Processing operations such as compacting, bailing and loading of trucks should be undertaken only during normal working hours as approved under the development consent.
- Noise levels must be audible beyond the boundary of the premises on which the
  machine is situated and not exceed the background noise level by more than 5 dB as
  measured at the property line of any residential or professional premise. Noise
  assessment must be made in accordance with the NSW Industrial Noise Policy (visit
  www.epa.nsw.gov.au/noise/industrial.htm) and other relevant noise assessment
  techniques and guidelines if compliance with this requirement needs to be demonstrated.
- The facility should not exceed a noise level of 70 dBA in any event.

Figure 14. Siting guide for a drop off collection point.



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## 14 Siting and design criteria – Manual collection points

This section provides the siting and design criteria for manual collection points. These types of facilities may be located at community recycling centres (drop off centres for common household problem wastes that can't be collected via council kerbside waste and recycling collection services), on industrial-zoned land to serve a local community, at other locations that may be adapted for this use, for example, former service stations.

A manual collection point may consist of drive through lanes where customers drop off eligible containers. The manual collection point is staffed and includes a "back-of-house" for container collection and storage. A person supervising the manual collection point will collect the container from and refund the customer.

This section provides additional siting and design requirements for manual collection points, in addition to those listed in section 8.

#### Siting requirements

The following minimum building standards apply to traditional collection points:

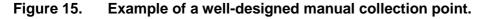
- they should not result in an increase in the gross floor area of the building
- they should not reduce vehicular access to, parking on or loading or unloading on or from, the premises
- if the alteration involves a loading dock, the alteration must not reduce the area for goods handling or the area for waste handling (including any recycling area)
- the facility should be established in conjunction with an existing commercial or industrial use which complies with the relevant zoning, building and fire codes
- the building must have a front door or entry with an awning or portico, or be distinguished by the use of different building materials, as part of the front facade wall of the building that faces the primary road or principal entry onto the site
- the facility should provide safe and orderly entry, all-weather access and a sufficient queuing area for vehicles using the facility so external traffic flows are not interrupted
- if appropriate, the facility should provide separate access from the public road network (e.g. a turn-off or slip lane)
- the facility should provide for separation of cars, trucks and pedestrians
- electricity connections should comply with the requirements of AS/NZS 3000:2007 -Electrical installations.
- the facility should be established in conjunction with an existing lawful industrial use
- the facility should have the consent in writing of the owner of the land on which the
  collection point is installed, if the facility is on public land, the consent in writing of the
  council or public authority
- the facility should be wholly located on a lot or in a road reserve, and not located on a road
- the facility should be secured from unauthorised entry or removal of materials
- the facility should not obstruct pedestrian traffic to force pedestrians onto the road or into any other unsafe situation
- the facility should not obstruct vehicular traffic circulation that results in interrupting the flow of traffic, or causes blockages, delays in traffic or other dangerous situations for motorists

- access and use of the site should comply with the Disability (Access to Premises -Buildings) Standards 2010;
- the site should be sufficiently illuminated to ensure safe operation at all times
- The facility should have sufficient space for storage of collected containers, be equipped
  with fire control measures, be located on level hardstand areas, be protected from the
  wind to prevent wind-blown litter, and have stormwater run-off diverted to appropriately
  manage leachate
- stored, collected containers should be placed on a flat, impervious surface (preferably a concrete slab) and incorporate a bund (in accordance with the EPA's Bunding Guidelines) – the bunded area should be of sufficient size to allow for storage of emptied containers and contain any spills
- stored collected containers should be as far as possible away from stormwater drains.

#### **Design requirements**

Manual collection points are basic designs that allow for the receipt and storage of containers. The following visual design considerations need to be addressed in designing and situating drop off collection points:

- the front facade wall of a new industrial building must contain at least 30% of materials that are not the main exterior finish
- the building design must comply with the requirements in the Codes SEPP.





## **Appropriate installation locations**

Manual collection points can be established on any lot zoned IN1, IN2, IN3, IN4 or SP3 and may only be carried out for the purpose of a collection point. A change of use from an existing use (service station) specified in the Codes SEPP to a manual collection point will be considered complying development. All underground storage tanks must be removed and the site must be suitably remediated (a site audit statement is to be provided to the Certifier demonstrating that the site is suitable for the new use) prior to the new use commencing.

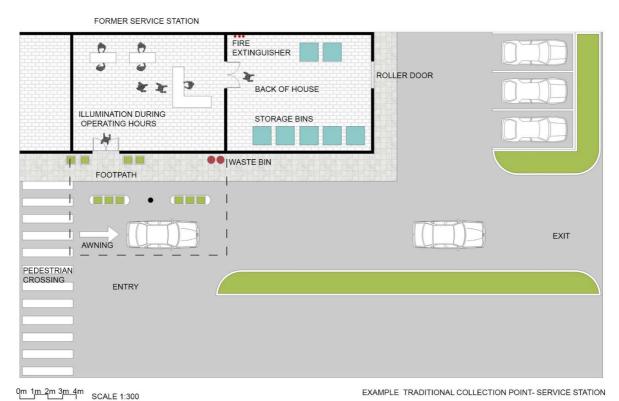
## **Operating guidelines**

To ensure that public health, safety and the environment is protected, a series of good operational and management criteria should be complied with when operating traditional collection points. Regular servicing, maintenance and cleaning is required to ensure they are available on a continuous basis to service the needs of the community, to prevent leakages of drink container contents that could run off into stormwater, and to prevent litter. The manual collection point should:

- Only accept the waste types as approved by the Container Deposit Scheme. The use of the collection points for the collection of other wastes such as solid wastes or hazardous wastes is prohibited;
- Store and process all deposited materials in the back-of-house away from the community;
- Be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests on a regular basis;
- Must be constructed so that any potential leachate is captured, which must be removed from the automated machine regularly in a sealed waste container and disposed lawfully (not stormwater);
- Any captured leachate must be removed from the recycling equipment regularly in a sealed waste container and disposed lawfully (not stormwater);

- Be free from dust, fumes or odours;
- Must not cause the contravention of any existing condition of the most recent development consent that applies to the premises relating to hours of operation, noise, car parking, loading, vehicular movement, traffic generation, waste management or landscaping;
- Processing operations such as compacting, bailing and loading of trucks should be undertaken only during normal working hours;
- Not be audible beyond the boundary of the premises on which the machine is situated and shall not exceed the background noise level by more than 5 dB as measured at the property line of any residential or professional premise. Noise assessment must be made in accordance with the NSW Industrial Noise Policy (EPA, 2000) and other relevant noise assessment techniques and guidelines if compliance with this requirement needs to be demonstrated: and
- Not exceed a noise level of 70 dBA in any event.

Figure 16. Siting guide for a manual collection point.



# 15 Siting and design requirements – Automated counting and sorting centre

This section provides the siting and design requirements for hubs and automated counting and sorting centre. These types of facilities will involve the automated counting of large volumes of containers that may be transported to the site from other collection points or Material Recycling Facilities.

This section provides additional siting and design requirements for automated counting and sorting centre, in addition to those listed within section 6.

### Siting requirements

Automated counting and sorting centres are large recycling facilities (up to 3,000 metres squares) which house high speed counting and sorting machines and multiple RVMs. The automated counting and sorting centre are staffed and include "back-of-house" for container collection and storage. In some instances, automated counting and sorting centre may be co-located within an existing structure such as a metal recycling facility.

The following minimum building standards apply to hubs and automated processing centres:

- The total area of the processing area on the site must not be more than 3,000 square metres:
- The total area of all buildings on the site must not be more than 20,000 square metres;
- The building must not be higher than 15m;
- The building setbacks must comply with the setbacks specified under the existing clauses in the Codes SEPP;
- The building must have a front door or entry with an awning or portico, or be
  distinguished by the use of different building materials, as part of the front façade wall of
  the building that faces the primary road or principal entry onto the site;
- The facility should provide:
- safe and orderly entry;
- all-weather access:
- sufficient queuing area for vehicles using the facility so that external traffic flows are not interrupted
- if appropriate, separate access from the public road network (e.g. a turn-off or slip lane);
   and
- separation of cars, trucks and pedestrians.
- All areas for the storage and handling of containers on-site must be designed with appropriate bunded areas that:
- have impervious flooring;
- have sufficient capacity to contain 110% of the total capacity of containers stored within the bund; and
- are designed in accordance with Department of Environment and Climate Change NSW (2007) Storing and Handling Liquids: Environmental Protections, Participants Manual, published in May 2007.
- Electrical connections comply with the requirements of AS/NZS 3000–2007 Electrical installations.

- In addition to the above, the installation of RVMs must be compliant with the specifications in this design guide relevant to the type of recycling equipment installed.
- Be established in conjunction with an existing lawful industrial use;
- Have the consent in writing of the owner of the land on which the recycling equipment is installed, if a council or public authority has the control or management of the land, the consent in writing of the council or public authority;
- Be wholly located within the lot or road reserve and not located on a road:
- Be secured from unauthorised entry or and removal of materials;
- Not obstruct pedestrian traffic so as to force pedestrians onto the road or into any other unsafe situation;
- Not obstruct vehicular traffic circulation that results in interrupting the flow of traffic, causing blockages, delays in traffic or other dangerous situations for motorists;
- Access and use of the site to comply with the Disability (Access to Premises Buildings) Standards 2010;
- Be sufficiently illuminated to ensure safe operation at all times;
- Have sufficient space for storage of collected containers;
- Is equipped with fire control measures;
- Is located on level hardstand areas;
- Is protected from the wind to prevent wind-blown litter;
- Has stormwater run-off diverted to appropriately management leachate;
- Stored, collected containers should be placed on a flat, impervious surface (preferably a
  concrete slab) and incorporate a bund (in accordance with the EPA's Bunding
  Guidelines). The bunded area should be of sufficient size to allow for storage of emptied
  containers and sufficient to contain any spills; and
- Store collected containers should be as far as possible away from stormwater drains.

## **Design requirements**

Hubs and automated processing centres are basic designs that allow for the receipt and storage of containers and may be located within an existing structure. The following visual design considerations need to be addressed in designing and siting hub and automated processing centres:

- The façade wall of a new industrial building must contain at least 30% of materials that are not the main exterior finish
- The building design must comply with the requirements specified under the existing clauses in the Codes SEPP.

Figure 17. Example of a well-designed automated counting and sorting centre.



#### **Appropriate installation locations**

Hubs and automated processing centres can be established on any lot zoned IN1, IN2, IN3, IN4 or SP3 and may only be carried out for the purpose of a collection point or recycling facility.

## **Operating guidelines**

To ensure that public health, safety and the environment is protected, a series of good operational and management criteria should be complied with when operating hubs and automated processing centres. Regular servicing, maintenance and cleaning is required to ensure they are available on a continuous basis to service the needs of the community, to prevent leakages of drink container contents that could run off into stormwater, and to prevent litter:

- Only accept the waste types as approved by the Container Deposit Scheme. The use of the hubs and automated processing centres for the collection of other wastes such as solid wastes or hazardous wastes is prohibited;
- Store and process all deposited materials in the back-of-house away from the customer accessible areas;
- Be maintained in a clean, safe and sanitary condition and kept free of litter, loose debris and pests on a regular basis;
- Must be constructed so that any potential leachate is captured, which must be removed from the automated machine regularly in a sealed waste container and disposed lawfully (not stormwater);
- Any captured leachate must be removed from the recycling equipment regularly in a sealed waste container and disposed lawfully;
- Be free from dust, fumes or odours;
- Must not cause the contravention of any existing condition of the most recent development consent that applies to the premises relating to hours of operation, noise, car parking, loading, vehicular movement, traffic generation, waste management or landscaping;

- Processing operations such as compacting, bailing and loading of trucks should be undertaken only during normal working hours as defined in the development consent;
- Not be audible beyond the boundary of the premises on which the machine is situated and shall not exceed the background noise level by more than 5 dB as measured at the property line of any residential or professional premise. Noise assessment must be made in accordance with the NSW Industrial Noise Policy (EPA, 2000) and other relevant noise assessment techniques and guidelines if compliance with this requirement needs to be demonstrated; and
- Not exceed a noise level of 70 dBA in any event.

Figure 18. Siting guide for an automated counting and sorting centre (located in part of an existing Materials Recycling Facility).

