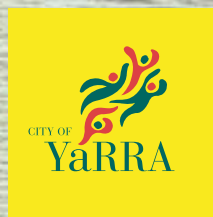


Commercial Waste



Management Guidelines





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Useful Phone Numbers

City of Yarra

Environmental Services
Public Health Unit
Building Services

9205 5555
www.yarracity.vic.gov.au

Water Authorities

City West Water

13 16 91
www.citywestwater.com.au

Yarra Valley Water

13 17 21
www.yvw.com.au

EcoRecycle Victoria

InfoLine
(freecall Victoria only)

1800 353 233
www.ecorecycle.vic.gov.au

EPA Victoria

Pollution Watchline
Litter Report Line

9695 2777
1800 35 25 55
www.epa.vic.gov.au

Purpose

This guideline details good waste management practices for commercial premises.

It provides guidance for:

- ◇ Business proprietors and their agents
- ◇ Council officers in approval and enforcement activities

It includes many simple and cheap practices businesses can employ to prevent contamination of the stormwater system by commercial waste.





Background

Commercial premises are an important part of the municipality's identity. These premises tend to create a large amount of waste on a daily basis.

A Residential Interface Study undertaken by Council identified that approximately 46% of interface issues relate to commercial waste. Problems identified included poor business practices such as dumping of rubbish and liquid waste in laneways.

A large amount of litter is removed from Yarra's shopping strips by Council's street cleansing service. Litter traps have been placed in stormwater pits located in shopping strips, to capture litter such as cardboard, plastic bottles and cigarette butts. This is estimated to be 11 tonnes per year. A lot of oil, grease, chemicals and cleaning agents are not captured. These contaminants pose a significant environmental hazard.

Commercial businesses have a responsibility under the *Environment Protection Act 1970* and Council's *Local Laws*, to prevent the discharge of waste from their property. Businesses can also encourage clientele by ensuring adjacent areas, such as footpaths and laneways, are clean.

The only way to comply with legislation governing environmental protection is to follow good waste management practices.

The dangers of commercial waste

Typical Components	Impacts	Typical Commercial Sources
Faecal coliforms, bacteria, viruses	Closure of beaches Human infection Illness and disease	waste water, sewer overflows
Organic matter	Low dissolved oxygen Smells, stress to aquatic life	Food, waste water, sewer overflows, grass and leaf litter
Pesticides, herbicides, petroleum products such as oil, lead, zinc	Accumulation in plants and animals Death of aquatic life	Cars, car parks, roads, waste oil, spills, atmospheric deposition
Silt, sand, gravel, clays	Muddy water, siltation, smothering of aquatic life	Hosing of paved areas
Paper, plastic, leaves, dead vegetation	Mainly visual, interferes with aquatic life	Incorrect storage of waste, customer litter (especially from fast food outlets), plant debris
Detergents <i>(Phosphorus and nitrogen or ammonium based)</i>	Promotes plant and algal growth, blue green algal bloom <i>(Eutrophication)</i>	Waste water, sewer overflows, animals
Glass	Physical danger to wildlife and to humans	Incorrect storage of waste

Source: CSIRO, Victorian Stormwater Committee, *Urban Stormwater: Best Practice Environmental Management Guidelines*, 1999.



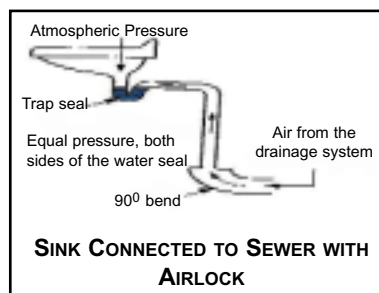
Know your drains

Sewer

Local water authorities manage the sewer system. Sewer pipes go to large treatment plants where the liquid is treated so that it is clean from materials that are hazardous to people and the environment.

Sewer pipes usually have an airlock of water in the bottom, just like you have in the kitchen sink or toilet.

Responsible use of the sewer system is important so that it is not overloaded. An overload of the sewer system will result in a spill to the environment.



Source: Plumbing Industry Board

Stormwater

Stormwater pipes go directly, without treatment, to our local waterways, the Merri Creek and Yarra River. They are usually located in outdoor areas including the streets and laneways.

They usually consist of a grate drain which when weather is dry, should also be dry. Only rainwater is allowed in stormwater drains.

SEWERAGE TREATMENT PLANT Source: Melbourne Water

STORM WATER MAIN DRAIN, YARRA RIVER



Good Waste Management Practices

1. Contact your local water authority, plumber or the City of Yarra if you are unsure which drains on your premise discharge to the stormwater system.
2. Educate staff on environmental protection practices. Contact Public Health on 9205 5555 for more information.
3. Tell staff which drain/s they must use to dispose of wastewater.
4. Place signs near drains to inform staff of which drain they are using.



WARNING
Discharge of wastewater, chemicals, detergents, oil or grease to land and/or the stormwater system damages our environment and may attract fines of up to \$4000.



Grease Traps

All commercial premises, that prepare food must be registered with the local water authority and have a Trade Waste Consent (TWC) in place with an appropriately sized grease trap.

A grease trap is where all kitchen fixtures (hand basin, sink, floor waste, bin wash area, etc.) are connected. This unit then discharges into the water authority's sewer system.

A grease trap is designed to:

- ✦ trap food particles, which settle to the bottom of the pit;
- ✦ trap grease/fats and oils float to the top of the pit and eventually hardens to a solid form; and
- ✦ only allows the wastewater that is in between the floating layer of grease/fat, oil and the food particles at the base of the pit to pass into the sewer.

**GOOD PRACTICE EXAMPLE OF WASTE
WATER DISPOSAL TO CLEANERS SINK
WITH CONNECTION TO SEWER**



The installation and proper maintenance of grease traps will:

- ✦ reduce sewer blockages;
- ✦ reduce sewer spills and the resultant impact on community health and the environment;
- ✦ reduce frequency of damage to customers properties due to sewer spills;
- ✦ reduce sewer maintenance cost; and
- ✦ provide improved environmental outcomes through treated sewer age effluent being able to be reclaimed and reused.

Good Waste Management Practices

1. Regularly contract company to clean grease trap.
2. Do not dispose of large volumes of oil to grease trap as this may cause it to overflow. Instead recycle waste oil.



Bin Wash Areas

Bin wash areas may be required where a business produces putrescible waste or where bins are likely to become soiled.

Generally, large food premises will require bin wash areas unless alternative arrangements have been made.

Bin wash areas are used for:

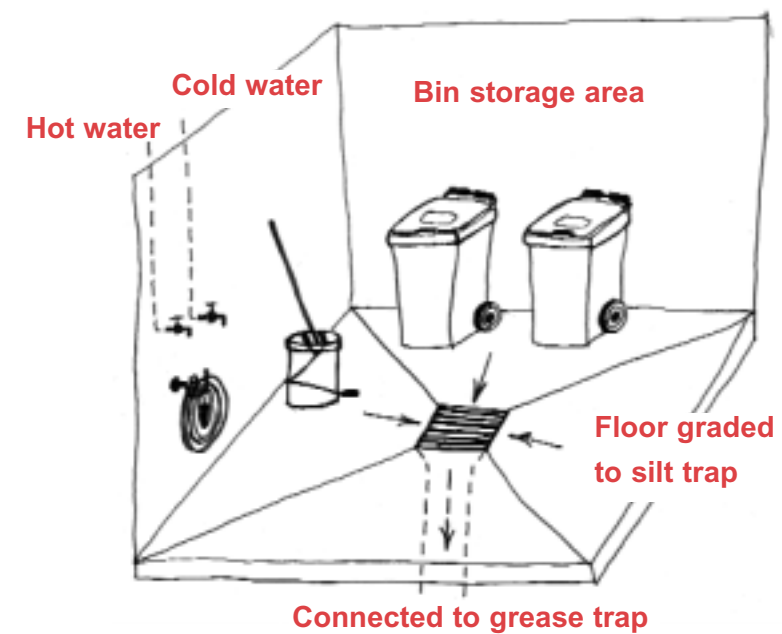
- ✦ Washing bins and disposing of the liquid waste;
- ✦ Storage of waste receptacles; and
- ✦ Storage of cleaning equipment, excluding chemicals.

FLOORWASTE DRAIN WITH
SILT TRAP AND CONNECTION
TO SEWER.



Bin wash areas should be:

- ✦ constructed of impervious material, eg concrete;
- ✦ an adequate size to be able to easily wash bins, cleaning equipment mop buckets, etc;
- ✦ graded down to a silt trap or grease trap as required by the local water and sewerage authority;
- ✦ connected to sewer; and
- ✦ if larger than 20m², locate under cover to prevent rainwater entering sewer.



BIN WASH AREA GOOD PRACTICE



Storage of chemicals, detergents, oil/grease is not allowed in the bin wash area in case of spillage. Such spillage may cause injuries to the water authority s sewer maintenance personnel and interfere with treatment of sewerage.

Cleaning chemicals and oil/grease need to be stored in a separate area which is easily cleanable and where waste may be contained.

Good Waste Management Practices

1. Prior to installing a bin wash area you must contact your local water and sewerage authority to apply for a Trade Waste Contract. Any alterations to existing bin wash areas may also require an alteration to your TWC.
2. Contact Council s Public Health Unit for advice on the construction of the area.



**GOOD PRACTICE
EXAMPLE OF A BIN
WASH AREA**

**MARIO'S CAFE,
303 BRUNSWICK ST,
FITZROY.**

Mechanical Exhaust Canopies

Businesses that cook food will have a mechanical exhaust canopy over their cooking equipment.

The Building Code Australia requires all kitchen mechanical exhaust canopies to be cleaned on a regular basis.



EXAMPLE OF GREASE LEAKING FROM A DIRTY EXHAUST FAN.

Dirty canopies can:

- ◇ leak grease from their exhaust fans onto premises roof and into the stormwater drains; and
- ◇ pose a fire risk as sparks/flame from cooking may ignite dirty grease filters.

Water from cleaning exhaust canopies, grease filters or cooking equipment must be disposed of to the sewer via a grease trap. A trade waste consent is required from your local water authority prior to making a connection to the grease trap.

For more information please contact the City of Yarra s Building Services or the Public Health Unit on 9205 5555.



Good Waste Management Practices

1. Clean kitchen exhaust systems on a yearly basis as per *Australian Standard 1851.6 — 1997*.
2. Require cleaning contractor to use correct cleaning techniques that do not allow cleaning liquids and grease to discharge to roof drainage system, eg. use of matting on roof around fan to absorb cleaning water.

WARNING

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Solid Waste

Waste disposal is a necessity for all commercial businesses. Poor waste management practices negatively impact on businesses, local amenity and environment. Storage and removal of waste can cause offensive odours and noise.

General Waste

General waste cannot be recycled or reused and its disposal is to landfill (tip). Waste contractors pass on costs for disposal in landfill to businesses.

Recyclable Waste

Organic/Putrescible Waste

Putrescible waste is waste that decomposes, such as food scraps (vegetable matter) and leaf litter. Such wastes attract pests and animals and can cause unpleasant odours.

This waste must be contained in a suitable bin and collected on a regular basis.



GOOD PRACTICE EXAMPLE OF
WASTE CARDBOARD STORAGE

Cardboard and paper

Cardboard and paper can be easily discharged to the environment by wind. If discharged it can clog stormwater drains and cause local flooding.

All waste cardboard and paper must be stored in a bin or a suitably secure area.

Plastic and Glass

Waste plastic and glass can create significant hazards to wildlife and the general public.

Good Waste Management Practices

1. Provide adequate storage for waste.
2. Dispose waste on a regular basis. For some businesses this may be everyday or once per week depending upon volumes produced.
3. Secure all waste within receptacles or other secure area.
4. Use bins with rubber wheels to reduce noise during pick up.

WARNING

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Liquid Waste

Oil

DID YOU NOW?

1 litre of oil can contaminate 1,000,000 litres of water.

Storing waste oil can be a very messy business.

Oil may be spilt on the surrounding ground when pouring into waste storage container.

The oil then contaminates the stormwater system next time it rains or if the area is hosed out.

The type of container used for storage is important to ensure that waste disposal is easy, safe for staff and protects the environment from contamination.

Containers **must** be:

- ✦ In good condition, eg no holes;
- ✦ In a clean condition;
- ✦ Be within a covered area; and
- ✦ Provided with a large funnel capable of receiving large volumes.

It is recommended that they also be:

- ✦ Capable of being easily moved, eg on castors;
- ✦ Secure (not accessible by the public); and
- ✦ Within a bunded area to prevent the spread of oil in the event of a large spill.

DID YOU NOW?

Waste oil is reprocessed into a range of products including:

- ▶ Stock feed
- ▶ Soap
- ▶ Candles
- ▶ Cosmetics
- ▶ Bio-diesel fuel
- ▶ Compost

Types of containers include:

20L drums	These usually are supplied with clean oil.
200L (44 gallon) drums	These require more space and can either have a removable lid or hole.
Purpose built tanks	Used by premises producing large amounts of waste oil — generally viable only for waste oil production of greater than 300L per 2-3 weeks.

Good Waste Management Practices

1. Decide which container size and collection contractor is applicable to your business based on the:
 - a. Volume of waste oil generated
 - b. Storage area available
 - c. Accessibility to storage area by collection contractor.
2. Store waste oil in clean containers that are provided with large washable funnels.
3. When not being filled place a cap or cover over hole or place the container undercover to prevent overflow from rainfall.
4. Provide the following procedure for cleaning up oil spills to all staff:
 - a. Absorb liquid oil with an absorbent material, eg. kitty litter, paper, sawdust, etc.
 - b. Sweep or shovel up absorbed oil and place in general waste bin.
 - c. Where detergent is used to clean ground, it must also be absorbed. Use a mop to clean ground surface rather than a hose.



Cleaning Liquids

Cleaning liquids contain detergent, sanitisers, grease, oil and food scraps. These components all pose a significant hazard to the environment and wildlife. All cleaning liquids must be disposed of to the sewer as per the local water authority's requirements.

Cleaning of external paved areas

External paved areas discharge to stormwater drains. It is important to manage litter and waste in these areas.

Good Waste Management Practices

1. Sweep areas and dispose of waste in the bin.
2. Mop area where cleaning liquids or food scraps have been spilt.
3. Do not hose out area, as this will discharge contaminants to the stormwater system.

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Waste Storage

There are a number of ways to ensure that waste is stored correctly. The area for the storage must be clearly designated and be determined by the following:

- ◇ quantity of waste generated;
- ◇ type of waste stored;
- ◇ area available for storage;
- ◇ number and type of receptacles/bins stored;
- ◇ location of storage area, ie accessible by trucks; and
- ◇ waste disposal services available to the area.

When choosing a waste disposal service you must consider the type and amount of waste the business generates.

Waste receptacles

All receptacles must contain waste and prevent its discharge to the environment. To achieve this they should be:

- ◇ Impervious and easily washable;
- ◇ Plastic with rubber wheels to reduce pick up noise;
- ◇ Provided with lids or placed in an area that is pest proof and waste is not likely to be discharged to the environment, eg through wind.
- ◇ Provided with drainage bungs, or resealable holes in the base, if too big to easily drain.



Types

Mobile Garbage Bins - plastic

Plastic bins available in 80 or 120 or 240 l sizes, which have wheels and tight fitting lids attached.

These are used for general waste and recyclable glass/metal/plastic.



Hoppers - plastic and metal

Hoppers are large receptacles, upwards of 300 l, which have lids and usually have drainage bungs. A front-loading truck usually picks them up so they may not be appropriate for a laneway pick up.

These may be used for general waste or cardboard/paper.



Wool Bales

These are generally used for containment of paper and cardboard waste.

Compaction System

A compaction system may be used to reduce the required waste storage space. This option is more costly and is best suited to larger developments.



Receptacle Lids

Commercial businesses can simply and effectively prevent litter by making sure that all waste receptacles are provided with lids.

The bins must not be overfilled so that the lids close completely.





Cleaning

Cleaning of receptacles can be achieved in the following ways:

- ✦ Clean with hot soapy water in an approved bin wash area.
- ✦ Replace regularly with clean bins. Most waste contractors offer a replacement service
- ✦ Contact an accredited bin-cleaning company for bins to be washed. Such companies generally clean bins within specially designed trucks. Look under Commercial Cleaners in the Yellow Pages.
- ✦ Take bins to self—serve commercial car wash to clean.

Location

All waste must be stored within the property boundary.

Bins not secured within the boundary allow unauthorised waste to be placed in the bin.

Unauthorised deposit of waste can cause:

- ✦ bins to overflow and contaminate stormwater;
- ✦ increase the cost of waste disposal incurred by business; and
- ✦ contamination of recyclables.

WARNING
Storage of bins outside property boundary is illegal and may result in a fine of up to \$1000 and /or impoundment of bins.

Good Waste Management Practices

1. Provide adequate waste storage within property.
2. Clearly designate an area on premises for the storage of waste.
3. Make sure that all staff members are aware of storage and disposal arrangements within the business.
4. Provide contact phone numbers of waste contractors. This may be very important so that your staff can avoid littering.
5. Advise staff that any discharge of waste is an offence under the Litter Provisions of the Environment Protection Act 1970 and is subject to fines of up to \$4000.
6. Monitor volume of waste produced regularly and alter storage and/or disposal arrangements as needed.

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Waste Reduction & Recycling

Waste Reduction

Where area for waste storage is insufficient, minimisation of waste produced needs to be considered. Contact EcoRecycle Victoria on **1800 353 233** and/or check their website www.ecorecycle.vic.gov.au for more information on reducing waste.

Good Waste Management Practices

1. List your wastes and where they come from (e.g. packaging with used items, food waste from food going off , etc) and consider how to avoid these wastes.
2. Talk to suppliers about reducing packaging or taking back packaging for reuse/recycling
3. Buy products in bulk to reduce packaging.
4. Purchase products with multiple uses. Eg. Food businesses can bulk buy garlic or tomato paste.
5. Use durable, reusable and cleanable containers to store surplus stock for later use.
6. Purchase products made from recyclable materials.
Eg. Paper instead of plastic plates for takeaway food.
7. Reduce use of waxed cardboard boxes. These boxes are not recyclable. Request supplier to take back waxed boxes for reuse.
8. Purchase products in reusable or recyclable containers.

Recycling

Most common waste types such as cardboard, paper, glass and plastic drink bottles, aluminium and steel cans film plastic, corks, used cooking oil and even food waste can be collected for recycling. Check the yellow pages and the EcoRecycle Victoria website www.ecorecycle.vic.gov.au or call 1800 353 233 to find businesses that offer recycling services.

Good Waste Management Practices

1. Work out what materials can be recycled cost effectively by talking to recyclers and staff.
2. Supply clearly identified bins in work areas to split waste streams (e.g. use signs and/or different coloured bins for different waste and recycling streams). Ready-to-print signs for all common recyclables are available via the EcoRecycle Victoria website
3. Let your staff and customers how to use recycling systems and periodically check that recyclable materials are not still going into in the general waste stream.
4. Donate waste products to local schools, community organizations, charities etc. Products include:
 - a. Corks
 - b. Plastic containers
 - c. Cardboard boxes
 - d. Food (Food Banks)
 - e. Unwanted furniture and office equipment
5. Buy Recycled. There are many recycled-content products (e.g. hand towels, toilet paper, office paper, furniture, carpet, etc). Check the Eco-Buy website for details.



This publication has been produced as part of the City of Yarra's Commercial Waste Education Project 2002-2003. This project is jointly funded by the Victorian Government through the EPA's Victorian Stormwater Action Program.

The information contained in this booklet has been prepared by Skye Scott for the City of Yarra. It is for general information only and does not purport to be comprehensive. It is current only at the date it is printed and the City of Yarra is under no obligation to update the information or correct any inaccuracy that may become apparent at a later date. The City of Yarra specifically excludes any liability for any error or inaccuracy in, or omissions from these pages and any loss or damage that you or any other person may suffer.

Published by the City of Yarra, Victoria, Australia

Also published on www.yarracity.vic.gov.au

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Design by Blue lines Tel 9417 0643

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