

WASTE AWARENESS

GETTING BACK TO BASICS

Creating a
**waste-wise
culture
together**

REDUCE

RE-USE

RECYCLE

HELP save OUR city

HELP

save our
WORLD



You
can
help!



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Making progress possible. Together.

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Disclaimer

Although all efforts were made to ensure the information accuracy within this booklet. The City of Cape Town will not be liable for any damages or losses arising from this booklet.

The content in this booklet provides you with information on waste avoidance, minimisation, and prevention as a guideline.

INTRODUCTION

Solid Waste Management is the core service delivery department for the Urban Waste Directorate of the City of Cape Town. It aims to ensure effective and efficient service delivery and, at the same time, continues to involve people in efforts to minimise the health and environmental impact of waste by encouraging waste avoidance and waste diversion. This booklet will provide you with the basics of how to get involved and be part of the waste solution.



WHAT IS WASTE

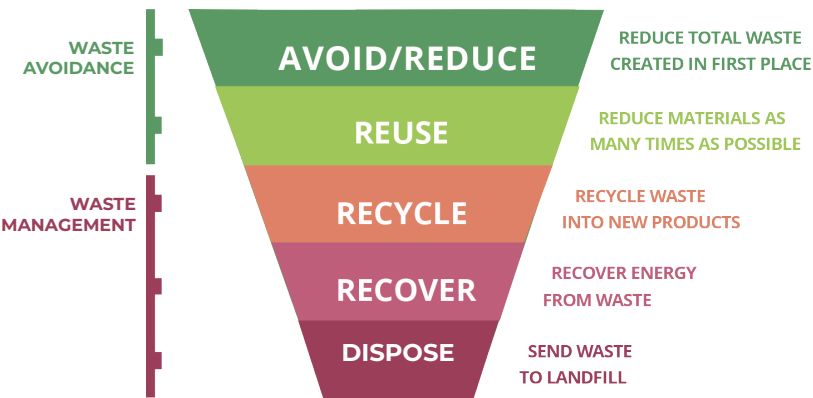
Waste refers to any unwanted or unusable material that is discarded or disposed of or generated through human activities and/or lifestyle. In addition, waste causes various forms of pollution. For example, the burning of waste can cause air pollution, the disposal of waste into water sources can cause water pollution and the disposal of waste on open soil can cause soil degradation. Moreover, the way that we create and dispose of waste must be relooked to move toward a sustainable approach.

You can get involved with waste and reduce waste to landfill. This is how!

The waste hierarchy is a simple ranking system. It ranks waste from the most- to the least-preferred waste management options, according to what is the best for the environment. According to the waste hierarchy, the most-preferred option is always to see how you can avoid generating waste in the first place and how you can reduce generating waste so that less waste ends up in your bin and on its way to the landfill.



WASTE HIERARCHY



Basic Understanding Of The Hierarchy

AVOID/REDUCE	The first level of the hierarchy is to AVOID waste production altogether or REDUCE the amount of waste we cannot avoid. This would include avoiding over-packaged goods and refusing single-use, disposable items such as straws and plastic bags. This should be our top priority.
REUSE	Next in the hierarchy is to REUSE items in their current form. For in-stance, return a glass bottle to the manufacturer to be recycled or use own utensil instead of disposable items.
RECYCLE	Thirdly, we are called on to RECYCLE waste items into new, useful items. Plastic bottles can be recycled into small pieces, which are then used to manufacture new products. In this way, the actual raw material gets put back into the system to make new products.
RECOVER	ENERGY CAPTURE means to use waste-to-energy processes to RECOVER the energy benefit from waste materials and convert it into electricity. WASTE TREATMENT includes composting organic waste to send less waste to landfill and reduce greenhouse gases, while keeping nutrients in the system.
DISPOSE	Waste should never be dumped in streets, fields, rivers, or oceans, as this causes pollution. Instead, waste must be DISPOSED of at formal LANDFILL sites or, in the case of hazardous items, special treatment and disposal facilities.

For more info browse:
<https://bit.ly/Smartliving2020>

Waste Types

Waste types refer to the different kinds of waste generated, including whether to reduce, reuse or recycle.

Starting with the black wheelie bin, it is home to almost all kinds of waste and is known as general waste or kitchen waste to be discarded at the landfill. If you take a closer look at what you throw in the black wheelie bin, you will find that many of the waste types can be composted, reduced or recycled.

Be aware that the following cannot be recycled

- ✗ Dirty paper or cardboard: pizza boxes
- ✗ Foil packets: chips packets
- ✗ Cigarette butts
- ✗ Cling wrap used to cover food
- ✗ Plastic coated or wax packaging: milk cartons, dog food bags, potato bags
- ✗ Some types of paper: carbon, stickers, self-adhesive, chemically treated fax, photo paper
- ✗ Wet or dirty paper: tissues, paper towel, food wrappings, used paper plates and cups.
- ✗ Disposable nappies

RE-USE, REDUCE AND RECYCLE

Some waste types can be reused whilst others can be sorted for recycling. Recycling is the process of turning waste into something new before the last option, where waste will be sent to landfill.

Managing Waste At Home

Set up a system in your household by using different bins for waste separation. All kitchen scraps such as food waste, fruit and vegetable peels can be composted.



Reuse

Consider how you can reuse your waste instead of just recycling it.

Some Tips:

- ✓ Re-use glass or plastic bottles instead of buying new ones.
- ✓ Reuse plastic shoppers or a cloth bag when doing you shopping.
- ✓ Donate old clothing, furniture, books, stationary or toys to be reused.
- ✓ Drop off bulky waste at the City drop-off facility for recycling.
- ✓ Repair items and re-use them instead of throwing them away.
- ✓ Store food in reusable containers instead of non-recyclable cling wrap or foil, which is made from resource-intensive aluminium.
- ✓ Reuse gift bags, gift paper and greeting cards.
- ✓ Plastic tubs and milk or juice cartons with a wax or plastic coating make excellent pots for seedlings.
- ✓ Take items such as cardboard toilet-roll cores, egg boxes, jars, margarine tubs and scrap paper to local schools for art projects.

Recycle

Ideas on how waste can be turned into something different or new



Why is recycling important?

Recycling is a technical process but it means that less natural resources would be extracted from Earth for the development or production of new materials and products. We also ensure less waste going to landfill. Our non-renewable resources should be protected – another reason to recycle.

A Tip to Consider

Borrow or rent items you only use for a short time, such as child carriers, car seats and prams, certain DIY projects, or power tools.

Plastic Recycling Labels to look out for.

Plastic recycling labels to look out for: Not all plastics are equal. Look for the labels to understand the different types of plastics.

Ease of recycling by type



Easy



Manageable



Difficult



Very difficult



For more info visit: https://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/Reduce_Your_Plastic_Waste_Poster.pdf

DROP OFF FACILITIES

Solid Waste Management in the City

Recycling made easy for you. In the City, Solid Waste Management has provided a number of waste drop-off facilities for residents that offer free access to drop off recyclables, as well as bulky garage and garden waste.

A drop-off facility is where residents can take specific types of refuse.

Depending on the site, this may include garden refuse, recyclable packaging (such as paper, cardboard, glass, metal and plastic), builders' rubble, garage or other bulky waste, e-waste and oil. Residents should confirm which types of refuse a specific drop-off facility accepts before visiting.

For more info browse:

<https://bit.ly/Smartliving2020>

The list of drop offs available to residents to recycle

Athlone REFUSE TRANSFER STATION, Settlers Way, Athlone

Atlantis, Dassenberg Road, Atlantis

Belhar, Adam Tas Avenue, Belhar

Bellville REFUSE TRANSFER STATION, Sacks Circle, Bellville

Bellville LANDFILL SITE, Sacks Circle, Bellville.

COASTAL PARK LANDFILL SITE, Baden Powell Drive, **Muizenberg**

De Grendel, Cnr 5th Avenue and Bertie Genade Street

Delft Drop-off Fabriek Street, Delft

Faure drop-off Old Faure Road, Eerste River

Gordon's Bay Drop-off Sir Lowry's Pass Road, Gordon's Bay **Hout**

Bay Drop-off Main Road, near Mandela Road, Hout Bay

Induland Drop-off Induland Avenue, **Hanover Park**

Kensington Drop-off C/o 13th Avenue and Dapper Street, Kensington

Killarney Drop-off Potsdam Road, Killarney

Kommetjie Drop-off Kommetjie

Road, Kommetjie

Kraaifontein Integrated Waste Management Facility Cnr Maroela and Sandringham roads, Kraaifontein

Macassar Drop-off Kramat Road, Macassar

Mitchells Plain Drop-off Spine Road, Mitchells Plain

Prince George Drive

Ravensmead Drop-off Industrial Ring Road, Ravensmead **Retreat** Drop-off Tenth Avenue, Retreat

Schaapkraal Drop-off Old Schaapkraal Road, Schaapkraal

Sea Point Drop-off Tramway Road, Sea Point

Simon's Town Drop-off Blue Waters Close, Simon's Town

Swartklip drop-off Swartklip Road, Mitchells Plain

Tygerdal Drop-off Orange Street, Tygerdal

Welgelegen Drop-off Akademie Street, Welgelegen

Woodstock Drop-Off 25 Beach Road, Woodstock

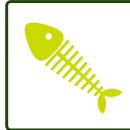
Wynberg Drop-Off Rosmead Ave, Wynberg

https://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/SW_Drop-off%20Table_and_Operating_Times.pdf

ORGANICS WASTE



EXAMPLES OF ORGANIC WASTE Plant Waste, Animal Waste, Food Waste.



What do we know about organic waste, and how does it affect climate change?

We know organic waste is any material that is compostable, such as vegetables, food scraps, or fruit peels. These should be separated from the rest of your kitchen waste and be composted into a compost heap.

When organic waste or food is dumped in landfills, it produces METHANE gas.

These gasses are also called Greenhouse Gasses and could contribute to accelerating climate change. By managing your food waste at home, you could generate less food waste going to landfill.

WHAT IS FOOD WASTE.

Food waste is your food scraps, fruit peels or leftover food ending up in your waste bin. Examples: Leftovers from a meal, expired food, stale food and blemished fruits and vegetables. When thrown in the bin and taken to landfill, it degrades in the ground and also produces methane gas.

HOW TO AVOID FOOD FROM BECOMING WASTE ENDING UP IN LANDFILL.

- Avoid wasting food that'll end up discarded as food waste
- Buy only what you need
- Prepare smaller portions and freeze leftovers
- Eat more Organic food so leftovers can be used as compost

Planning	• Make a shopping list and to plan meals • Check what is in your fridge and cupboard
Shopping	• Stick to your shopping list • Avoid impulsive buying • Avoid buying in bulk, especially if you don't have the facility to store it at the correct temperature • Grow your own food
Storage	• Store food at the correct temperature, follow the label • Look at your expiry and best before dates , to make sure food does not spoil/expire • Keep storage area clean and organised
Preparation	• Plan meals • Avoid preparing excessive food
Leftovers	• Leftover food can be composted • Food to be consumed at a later stage should be stored in air-tight container and in the fridge or freezer • Do not keep food at room temperature for more than 2 hours • Keep left overs for 3 to 4 days • Find recipes to use your leftovers as ingredients for new meals

HOME COMPOSTING

Composting refers to the natural process of recycling food scraps and organic waste. Kitchen scraps, twigs and dead leaves are great for making compost. It can be used to feed your soil when creating your own food garden. By doing home composting you reduce food or organic waste being disposed at landfill.

<https://www.capetown.gov.za/Family%20and%20home/greener-living/green-gardening-and-eating/start-composting-at-home>

What is compost and how is it made?

Compost is a mixture of ingredients used to fertilise and improve the soil. Therefore, composting is recycling plant and food waste through the decomposition of the organic material, where worms can help you with the decomposition process.

What can be composted?

Compostable	Non - Compostable
• Garden waste such as grass cuttings, leaves, soil, branches and so on • Vegetable and fruit peelings • Tea leaves and tea bags • Coffee grounds • Egg shells • Paper, cardboard, sawdust and wood shavings • Wood fire ash • Seaweed (in moderation, as it is very salty) • Torn up newspaper and kitchen towels	• Anything that doesn't rot, like metals, glass and plastics • Meat (it attracts rodents) • Garden waste sprayed with pesticides • Toilet or septic tank sewage • Dead animals • Cooked table scraps (only if your system can accommodate these)

STEPS TO COMPOSTING

The easiest way to make compost is simply to create a pile of organic waste, about 1 m wide, in a sheltered and shady corner of the garden. To keep the heap tidy, you might prefer to make it in a container. A sealed container is advisable to discourage rats.

Follow these steps:

- 1 First, throw down a layer of coarse material consisting of twigs and straw for aeration (air to move through).
- 2 Place alternate layers of "brown" (dried leaves) and "green" (fresh grass cuttings or kitchen waste) material in equal proportions. If available, put some manure (or seaweed) as an activator layer in between.
- 3 Sprinkle non-potable water (greywater or rainwater), soil, and shredded paper intermittently between the layers until your heap is 1,5 m high.
- 4 You can build layers up over time as you accumulate kitchen waste, mow the lawn, prune shrubs, or rake dry leaves. Keep the heap covered with a layer of straw, soil, or old carpet to keep rats, insects and other pests out.
- 5 Soil is needed to introduce beneficial organisms, such as earthworms and woodlice, into the pile to help the decomposition process.
- 6 It is useful to have an extra pile of material (dry leaves or shredded newspaper or soil) to place on top of the heap to cover kitchen waste. This will keep flies away and ensure that there is little or no smell.
- 7 Water the heap regularly (keep it moist, but not wet, with non-potable water) and turn it over with a garden fork after a few months to speed up the process.
- 8 The compost is ready to use when it is dark, crumbly, and smells like soil. This can take between 6 weeks and 6 months, depending on the time of year and the organic material used. A good idea is to have 2 or more compost heaps, so you can have one breaking down, while the other one is being added to.



<https://www.capetown.gov.za/CompostingProgramme>

HOW TO START A WORM BIN

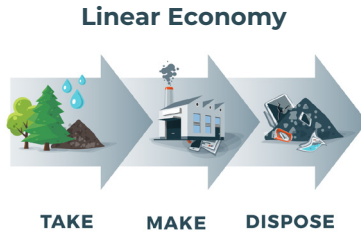
Earthworms help you make excellent, rich compost. They can also be used if you don't have a garden, but still wish to compost your organic kitchen waste.



THE CIRCULAR ECONOMY

UNDERSTANDING WASTE IN THE CIRCULAR ECONOMY

To understand the circular economy, we need to understand the linear economy. The City Smart Living Handbook describes this clearly to ensure it is easily understandable.



One of the key tools to implement the zero-waste philosophy is the circular economy. Traditionally, our economy has been linear in terms of materials: we make goods, use them, and then dispose of them. The circular economy is an alternative economic model. Under such a model, we keep goods and materials in use for as long as possible, extracting maximum value from them. Once they reach the end of their life, we recover and regenerate them, minimising disposal or incineration. The essence of a circular economy is to preserve natural resources by retaining the quality and value of products, their parts, and the materials used to make them.

A circular economy also separates the value chains of renewable resources ("biological nutrients") and non-renewable resources ("technical nutrients"), as they require different technologies and methods. To get to a circular economy, we need all stakeholders, including government, the private sector, households and communities, to be committed and involved. It requires us to change our thinking and behaviour – from how we design products and services, to how we manufacture, distribute, use, reuse, repair, recycle and, ultimately, dispose of these products or services.



Read more on the circular economy in the Waste Section of the Smart Living Handbook. You can also consult the link as another resource for awareness.

<https://earth5r.org/circular-economy-powai-waste-management-livelihood/>

<https://bit.ly/Smartliving2020>

WASTE MANAGEMENT IN SCHOOLS

It doesn't matter how big or small you are, **YOU, CAN MAKE A DIFFERENCE!**

Children are the best advocates for change and we want you to help us avoid waste being generated and to promote waste minimization in schools. This is how you can assist.

Tips for schools

- For stay-in learners, schools should plan meals to avoid food waste being generated.
- Tuck Shops should encourage learners to throw their wastepaper and wrappers in the bin provided at their shop.

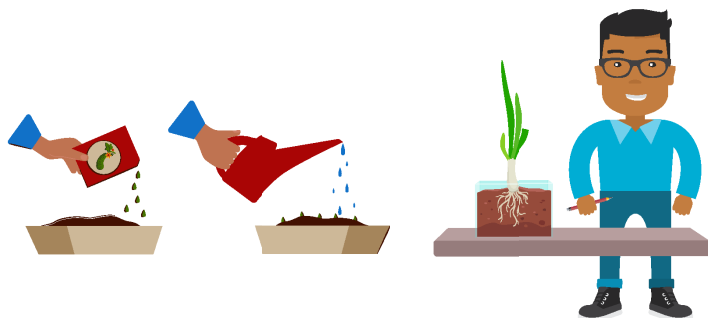


- By using reusable items, you can reduce the usage of wrapping and packaging which drastically reduces waste to bin and landfill.
- Pack your food in reusable lunchboxes or plasticware. Eat fresh fruits and vegetables that nourishes you with vitamins minerals and energy.
- Hot or cold drinks can be stored in a flask or just a normal reusable water bottle for your liquids.
- If you are going to use a straw, try to get a metal or any other reusable straw to avoid plastic ending up in the bin.
- If you need to use cutlery it would be good to use wooden or stainless steel to avoid unnecessary use of disposable plastics.
- Instead of using disposable napkins or tissue rather make use of reusable cloth napkins.

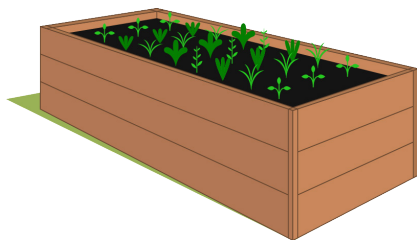
Ideas On How To Minimise Waste At Schools

Design a school garden for organics and recycling

The most important advice is to start small. Containers are very manageable, and you can grow just about anything in them. Containers allow you to create an almost immediate impact, anywhere, at minimal cost.



Raised beds are excellent growing areas, making it less likely that precious seedlings will be accidentally trampled.



Fill the beds with nutrient-rich potting soil and compost. Beds shouldn't be any wider than 90cm across, so that everyone can easily reach the middle of the beds from the sides.

Decide as a group how the Garden should look and what everyone would agree to grow. Work in groups and present to the class your design and list of items you would like to grow.

Everyone is far more likely to eat fruits and vegetables they've grown themselves. Choose crops that are easy to grow and ready to harvest in short timelines.



School garden suggestions:

Try and select both winter and summer plants, so that you can have produce all year round.



Popular choices are red lettuces, green lettuces, beetroots, turnips, celery, spinach, leeks, green cabbage, broccoli, carrots, radish, tomatoes, eggplant, zucchini.



Don't forget herbs, many of which have beautiful, bee-friendly flowers. Sweet basil, rosemary, oregano, common thyme, parsley.



Potatoes are fun to sprout before planting into potato sacks or beds. Everyone will love the hands-on growing process and unearthing the potatoes, nature's very own treasure hunt.

Sort and Separate at School

Separating waste is the first step in managing your school's rubbish. Set up bins for the different kinds of waste, and make sure the right bins are used.

Glass

Glass is 100% recyclable, yet so much of it is thrown away and left to landfills where it will never decompose.

Cans

All types of cans namely food, beverage, polish, paint and aerosol cans, are recyclable.

Paper and cardboard

Separate your recyclables from wet waste. Paper items that are wet or soiled cannot be recycled. Enroll in a paper recycling programme and raise funds for your school.

Plastics

Avoiding single use plastic is always the first choice. Use plastic containers for separating recyclables at home. The rest can be separated for recycling.



As we already know Organic waste can be collected and used to create compost to give your food garden nutrients.

Make sure recycle bins are used correctly and that the items are clean when they go in the bin.

For recycling to work, educating students and staff is essential. Some local councils help schools to set up recycling programmes and educate their staff and students.

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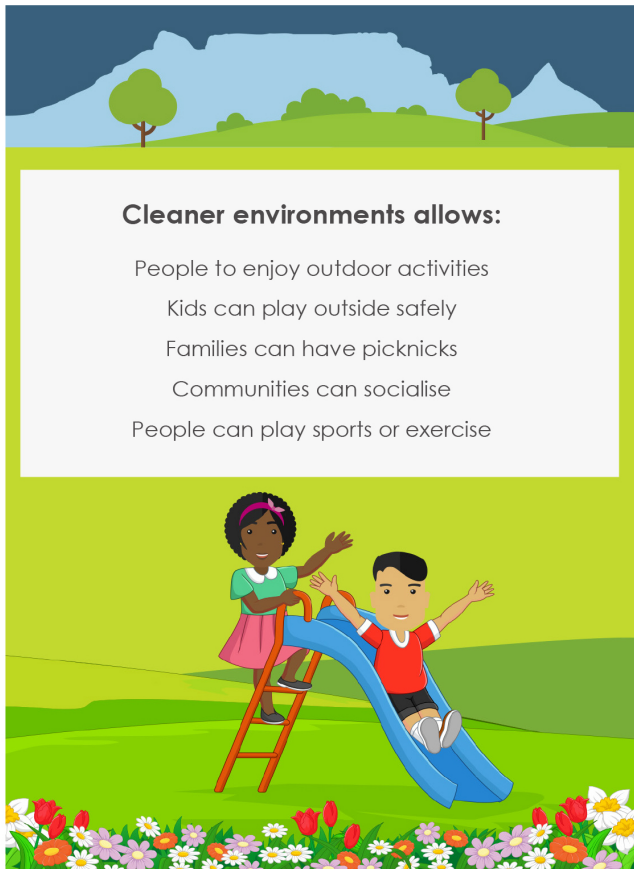


Start putting your idea's together to start saving our environment, but also starting a circular economy in your school or community today.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

ILLEGAL DUMPING - What is illegal dumping?

Dumping is when people, for their own convenience, throw down waste materials such as building rubble, empty containers, medical waste, garden refuse and household rubbish in or on any public open spaces. We have a dumping problem in Cape Town. It is one of the biggest challenges the City faces. It is expensive, damages our environment and is harmful to ourselves and our animals.



Cleaner environments allows:

People to enjoy outdoor activities

Kids can play outside safely

Families can have picnicks

Communities can socialise

People can play sports or exercise

The impact of Illegal Dumping

It costs the City millions of rands every year to clean up illegal dumping. Cleaning up illegally dumped waste is about 20 times more expensive than collecting it from individual wheelie bins, as specialised equipment, including front-end loaders, must be hired to remove the waste.

(<https://www.capetown.gov.za/Family%20and%20home/safety-in-the-home/environmental-health-in-the-home/prevent-illegal-dumping>)

Why you should not allow illegal dumping to happen

- ✘ It makes your neighborhood look ugly
- ✘ It allows for pests like flies, ticks and cockroaches to breed
- ✘ Materials like medical waste can spread dangerous infections
- ✘ Rubbish smells badly
- ✘ It can block drains and pollutes our water ways
- ✘ It is expensive to remove.
- ✘ It impacts the environment as the unwanted materials dumped degrades and could pollute the environment.

This behavior is unacceptable. Report illegal dumping

If you have the culprit's vehicle registration number and/or can identify him/her:

Telephone: 021 444 6231/ 021 444 6224/ 021 444 6223

Email: SolidWaste.bylaw@capetown.gov.za

City Call Centre: 086 0103 089

What can you do?

- ✓ Dispose of your waste only in bins and at approved drop-offs or landfill sites.
- ✓ Buy additional waste bins if you need them.
- ✓ Make others aware of the importance of keeping our environment clean and litter free.
- ✓ Fence off your property to prevent others from dumping on it.
- ✓ Residents can report those doing wrong to the Solid Waste By-Law Enforcement Unit



SOLID WASTE LAW ENFORCEMENT

The Solid Waste has its own unique
BY-LAW ENFORCEMENT UNIT.

This unit ensures compliance and provides the following services:

1. Solid waste awareness
2. Mobile patrols
3. Active surveillance monitoring
4. Business surveys checking for waste management plans Issuing of compliance notices.

Non-compliance by conducting:

- Complaints investigation
- Fines for littering
- Fines for illegal dumping
- Impoundment (holding place) of vehicles

Know what section 15(1) of the by-law, 2009 says.

Fines can be viewed of the website.

DON'T LITTER OR DUMP

No person may drop, throw, deposit, spill, dump, store or in any other way discard, any litter or waste into or into any public place, municipal drain, land, vacant erf, stream, water course, street,

<https://www.capetown.gov.za/local%20and%20communities/community-health-and-safety/healthy-environment/prevent-illegal-dumping>



SOLID WASTE WASTE MANAGEMENT:

HELP US CONTROL ILLEGAL DUMPING BY REPORTING:

City Call Centre: **086 0103 089**

If you have the culprit's vehicle registration number and/or can identify him/her:

Telephone: **021 444 6231/ 021 444 6224/ 021 444 6223**

Email: **SolidWaste.bylaw@capetown.gov.za**

OTHER WASTE RELATED QUERIES

089 103 0860 or

wastewise@capetown.gov.za

City walk-in centers see:

www.capetown.gov.za/facilities

<https://www.capetown.gov.za/RecyclingGuide>

<https://www.capetown.gov.za/HazardousWaste>

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