

# FACT SHEET

## Litter in the Cradle Coast



Do you know what happens to your litter after you put it in the bin?

You may think that putting a piece of litter or bag of garbage in the bin is the end of the story...but actually it's an important *first step* in the safe and effective management of waste that helps our community and our environment.

It is only in the last few decades that waste has been managed scientifically, and now days there are important requirements for licences and monitoring to ensure that odours and vermin are properly controlled, and that water and soil contamination is avoided.

The first sanitary landfills were holes in the ground or disused quarries. These old style tips often created water pollution and had a high risk of fire or explosion from accumulated methane generated within the waste.

Today, landfills in the Cradle Coast region are specially designed to handle waste sustainably.

### **How is a landfill created?**

Before a new landfill can be created, licences and permits must be obtained from the Local Council and from the Environmental Protection Agency (EPA). These documents confirm the site as a suitable location for a landfill and set out rules for its construction, maintenance and remediation.

The licence specifies how the landfill must be constructed to meet Australia's high standards of environmental and public health.

Independent experts are often used to check the construction quality and ensure that licence conditions are being safely and adequately met.

Some of the features of modern landfills include:

- Constructed linings of clay, gravel and geofabric to prevent leachate leakage;
- Leachate drains and collection ponds to divert liquid waste into the sewage system;
- Gas collection pipes to safely release gases and prevent dangerous build up;
- Test bores to check local water quality and allow early detection and prevention of contamination.

## **How is a landfill maintained?**

Trucks collect litter and garbage from your kerbside bin (or public bin) and transport it to a landfill. As waste is deposited into a cell, it is spread evenly and compressed by a compactor. At the end of each day, the compacted area is covered with a thin layer of soil or other inert material to minimise odour, stop the spread of litter, and deter vermin and birds.

Waste continues to be added to the landfill cell and is pushed down (compacted) by machinery to minimise air pockets, compress materials and make more space for additional waste.

The landfill is staffed by people who operate the compactors, dozers and excavators and assist with directing incoming waste to the right areas of the landfill. Staff also monitor groundwater and the leachate ponds and collect any litter around the landfill site.

External auditors also enter the landfill site to regularly check that it is being sustainably managed and that the original licence conditions are being met.

## **What happens once a landfill reaches its capacity?**

When compacted waste in a cell reaches its maximum allowed height, it is capped to prevent rainwater from entering, and to prevent gases, litter or other pollutants from escaping.

When all of a landfill's cells are full and capped, the entire landfill is closed and it enters a period of monitoring and maintenance. The clay cap is usually covered with soil and local grasses are planted.

The monitoring period can continue for approximately 50 years until all biodegradable materials have broken down and are no longer a potential environmental hazard.

Leachate control is one of the most important tasks in landfill management. Groundwater is regularly checked for contamination and storm-water runoff from rainfall is kept separate from leachate.

Money from residential and business rates and waste management fees collected at Transfer Station gates go towards the long-term monitoring and management of landfill sites. It can be a long journey from a piece of litter in a bin to a rehabilitated landfill site, but it's an important one from which we all benefit.

To find what waste management services exist in the Cradle Coast region, visit [www.rethinkwaste.com.au](http://www.rethinkwaste.com.au) and select your Council from the drop-down list.

## Good to know

**Leachate:** liquid that drains (leaches) from layered waste in a landfill, collected in a specially constructed pond before being safely piped into the sewage system. If not collected, leachate can pollute groundwater and enter nearby waterways.

**Cell:** the name given to each specially constructed 'hole' within a landfill where waste is deposited. Cells are custom built to contain waste and odours, and safely drain leachate into the sewage system.

**Capped:** what happens to a cell once it is full of waste and no longer used. Usually caps are constructed from clay to prevent rain water from entering the old cell. Caps are often then covered in soil and revegetated.

[www.rethinkwaste.com.au](http://www.rethinkwaste.com.au)