

# Integrated Waste Management

*Total self-reliance for the community's refuse collection and disposal means ensuring that we can deal with all the waste we produce. In the past most of the Island's rubbish has been disposed of at a landfill site but this space is scarce. As a result the local authority has given Island Waste the task of developing alternative ways of disposing of its waste.*

## Collection

There are 61,000 households on the Isle of Wight, generating 36,000 tonnes of waste every year. It is estimated that about a quarter of this is organic waste that could be composted. Residents are provided with a green bucket in which to store separately their organic kitchen waste. The refuse is then collected on a weekly basis in specially designed 'split-bodied' vehicles that can transport organic waste separately alongside ordinary domestic refuse.



A fortnightly kerbside-recycling scheme is also operated. Black boxes have been distributed to households in order that they can separate for collection old newspapers and magazines. This scheme will be extended to include the collection of glass in 2001.



## Civic Amenity Sites

The island's main Civic Amenity site was completely rebuilt at the start of the contract. Containers allow for the separate collection of wood, metals, paper & cardboard and recycling banks are available for aluminium cans, glass, textiles, oil and batteries. The Island has two other smaller

Civic Amenity sites that are open at weekends. Over 7,000 tonnes of garden waste are collected annually from all three sites. This waste is shredded, mixed and then composted.

## Waste to Energy

Waste that can't be composted or recycled can be re-used in other ways. Domestic refuse is taken to a waste derived fuel plant, where it is converted into a material that can be burned to generate electricity at a neighbouring power plant. This power plant provides enough electricity every day to power 500 homes. Prospects to modify the plant at the beginning of 2001 will double this output. In addition to the production of fuel, the plant also provides for the magnetic extraction of steel (over 600 tonnes per year) and aluminium (over 35 tonnes per year).



## Landfill

Inevitably, some of the waste that we collect cannot be re-used, recovered or recycled. This waste has to be disposed of in the safest, most environmentally

friendly way. Island Waste have engineered the new landfill site at Standen Heath to the highest environmental standards. This site's lifespan will be significantly lengthened due to the investment we have made in recycling more and more of the Island's waste.

## Contact details

Biffa and Island Waste Services are setting the standards for the way in which domestic waste is managed. If you would like to know more please write to:

Island Waste Services, Forest Park Waste Recycling Centre  
Forest Road, Newport  
Isle of Wight, PO30 5YS  
Tel: 01983 821234  
www.islandwaste.co.uk

Biffa Waste Services Ltd.  
Coronation Road,  
Cressex, High Wycombe  
HP12 3TZ  
Tel: 01494 521221  
www.biffa.co.uk



**Working together to conserve the Island's resources.**



## About Island Waste...

*The Isle of Wight is the first county in the UK to initiate a fully integrated waste management contract. It's a deal that represents best value through an ever improving standard of service, year on year. The contract hands full responsibility for the collection, recycling and disposal of all the Island's household waste from the Council to Island Waste Services, a wholly owned subsidiary of national waste management company, Biffa.*

*This pioneering approach to achieving total self-reliance for the community's waste collection and disposal places great emphasis on recycling. In fact, Island Waste has committed itself to recycling 50% of the Island's domestic refuse by 2001, significantly higher than the Council's stringent 28% target and the UK national average.*

*The project is very much a partnership and through the Private Finance Initiative, the Island has benefited from Biffa's skills and £14 million Investment programme which has enabled the appointment of two community liaison officers and a number of recycling schemes. You can read all about them inside this leaflet.*



**Working together to conserve the Island's resources.**

# New Composter - Top of the Heap

Island Waste's composting plant is one of the largest composting facilities in the UK. It is the final component in the Island's integrated waste management strategy and is helping the company achieve its impressive recycling targets.

The state-of-the-art plant - supplied by, Wright Environmental of Canada - is able to recycle around 15,000 tonnes of biodegradable waste every year, producing somewhere in the region of 40 tonnes of useful compost every day from waste that would normally end up in a landfill site.

Island residents supply much of this 'biodegradable waste' via municipal refuse collection. Split-bodied trucks collect organic kitchen waste alongside ordinary domestic refuse and take it to the composting plant. In addition, the plant takes green waste such as grass cuttings, leaves and hedge trimmings, deposited by the public at the Island's three Civic Amenity sites.

The potential to collect organic kitchen waste every year combined with large amounts of garden waste deposited at our Civic Amenity sites means we can compost and avoid sending to landfill a huge amount of rubbish.

## How it works

The new plant composts material in much the same way as a gardener would use a compost heap, only on a bigger scale. Larger items are shredded and the waste is then mixed before everything is fed into the plant. This is a huge steel container about the size of three double-decker buses parked end to end.

As waste is dropped into one end of the plant, it is moved towards the other end on a series of trays. Half way through the process the compost is mixed to encourage decomposition. This 'rotting down' of the waste is carried out by bacteria, so temperatures and humidity within the container must be carefully monitored and controlled to

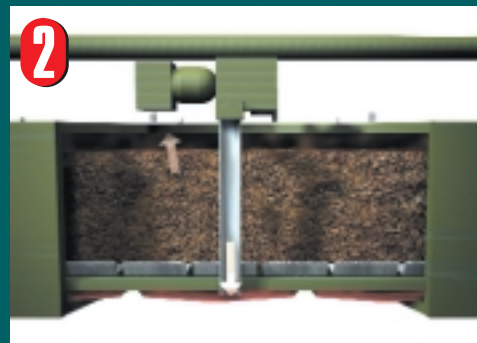
maintain the right conditions for the bacteria to work. From start to finish the entire process takes just 14 days.

When the compost finally appears at the other end of the plant, it is channelled into containers and left outside to mature for a couple of months. It is then used as a soil improver.

## THE PROCESS The pictures below demonstrate each stage of the composting process



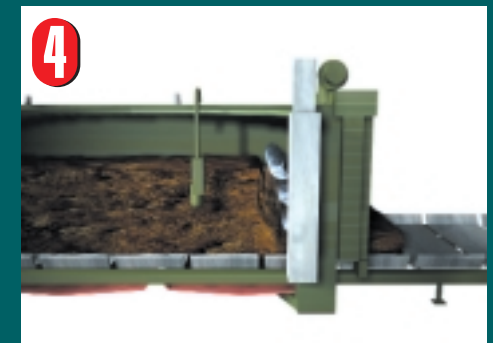
Green waste is shredded and mixed with organic waste. It is fed into the composting tunnels where it begins a two-week journey on a series of trays.



The temperature and humidity are carefully controlled to encourage bacteria to break down the compost. These conditions are maintained throughout the entire process.



After six days, the waste is thoroughly mixed again to keep the bacteria working.



At the end of the process the compost is transported to an area where it is regularly turned and left to mature for one to two months before it is ready for use as a soil improver.