# **Landfill Tax and Community Grants**

Landfill Tax (UK) was introduced in 1996 and is an environmental tax primarily levied on Landfill Operators (LOs) on each tonne of waste sent to Landfill. Commercial users of managed Landfill sites are also subject to this tax.

This tax is to encourage sustainable waste management by promoting recycling and waste reduction. Landfill is no longer considered the cheap and easy option.

The Landfill tax in turn generates revenue that can be invested in sustainable and environmental projects. Landfill operators are able to contribute up to 6% of their Landfill tax liability to a range of approved community and environmental projects and reclaim 90% of their contribution as a tax credit.

Many landfill operators, including Severn Waste Services via FCC Communities Foundation Ltd, have their own grant schemes. These organisations have to be registered with ENTRUST (who regulate the scheme) as an Environmental Body (EB).

To be eligible, your project has to take place within 10 miles of a Landfill site or an Energy from Waste (EfW) facility.

Applications can only be accepted from:

Registered Charity which operates a community facility A Church or Parochial Church Council A Parish or Town Council or a Management Committee or User Association acting on behalf of a Parish or Town Council A Local Authority A CASC Registered Sports Club

For more information: <a href="https://www.severnwaste.com/community/">https://www.severnwaste.com/community/</a>

## Landfill

Managing the Landfill for Herefordshire and Worcestershire

# Landfill



There has been a landfill site at Hill and Moor since the 1960's. Severn Waste Services took over the running of this site from 1998 when the company was founded to run the Waste Management contract for Herefordshire Council and Worcestershire County Council.

The primary focus with waste management is **Reduce**, **Reuse**, **Recycle**. Once these have been explored, then the process of **Recovery** should be considered. Landfill is used only when these options have been exhausted.

In 1998 around 90% of Herefordshire and Worcestershire's municipal waste was taken to Landfill. Today's figure is around 15%.

This decrease has been achieved by improving recycling rates and by using nonrecyclable waste for the purpose of energy recovery at our Hartlebury Energy from Waste (EfW) facility.

Today, the categories of items permitted to be landfilled are more stringent than the "anything goes" ethos of the past. For example, upholstered seating such as sofas and chairs are no longer able to be deposited in a landfill site, due to the POPS (Persistent Organic Pollutants) regulations. They are now sent for Energy Recovery.

#### Did you know...?

The earliest known waste disposal site was a covered pit in Crete dating back to 3000 BCE.







# So, what is a landfill?

Whilst Landfill sites are often thought of as "a hole in the ground" the reality is now completely different.

In the 1800's, the link between ill health/disease and poor environmental conditions was identified. Waste, at this time had been disposed of by dumping it in cities. In the late 1800's, householders were required to store their waste in dustbins and Local Authorities became responsible for the collection and disposal of waste. This led to the use of landfill sites.

Prior to the 1980's, the majority of landfill sites relied on the natural ability of the disposed waste to biodegrade and for the surrounding land and geology to absorb the resulting leachate. (Leachate is defined as a contaminated liquid derived from water, such as rainwater, that has percolated through a landfill site absorbing contaminants. It is highly polluting. Think bin-juice on an industrial scale.)

During the 1980's, European Legislation was adopted and landfills operated as full containment facilities, in that biodegraded waste and its byproducts stay within the site. This was to ensure the waste didn't cause harm to human health or the environment.

Waste is deposited in specific areas within a landfill site. These areas are called Cells. Cells are lined with an impermeable layer to ensure leachate does not escape the site thus protecting the underlying groundwater. As one cell is being filled, another is being engineered and previously landfilled areas are being restored.

Waste is spread out and compacted by a steel wheeled/drum landfill compactor which tears, shreds and presses the items in a series of layers. The compaction reduces the amount of landfill air space. The waste decomposes as it is broken down by anaerobic microbes due to the lack of oxygen.

When the cell is full, it is capped with another impermeable layer to prevent the ingress of rainwater and covered with a layer of soil which is then planted with vegetation. The cap also prevents landfill gas from escaping into the atmosphere. This is repeated across the remaining cells until the landfill is full.

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## But then what?

A landfill site is carefully managed both during its use and after it's been closed.

**Leachate** is harvested by a series of wells drilled into the waste which are lined with pipes. Pumps are fitted into each well and any leachate is pumped to on-site storage tanks. The leachate is then treated on site before being discharged to a sewer or watercourse or alternatively removed by tanker to a licenced disposal facility. Landfill leachate is monitored and sampled regularly to ensure there is no impact on the environment.

**Gas control** – when biodegradable waste (all waste will biodegrade eventually) rots in a landfill without air, it releases greenhouse gasses such as methane and carbon dioxide. Methane is over 20 times more harmful to the environment than carbon dioxide. It is vital that gas levels are monitored around landfill sites so any changes can be detected.

Our landfill site has a gas control system installed. Wells are drilled into the waste and lined with pipes, these pipes in turn are connected to a central pump which sucks out any landfill gas produced. This gas in turn is used to produce electricity.

**Groundwater/Surface waters** – these waters are monitored to ensure they remain uncontaminated by landfill activities. This leachate checks control systems are working and leachate isn't leaking from the landfill cells.

Once a landfill is full and the site is closed, it continues to be monitored to ensure ongoing protection of the environment for up to 60 years.







