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Waste Handling TACKLING WEEE AND HAZARDOUS WASTE



Electrical and hazardous waste is now more heavily legislated than ever and can cause commercial businesses a headache when it comes to disposal. Expert **Jason Cracknell** offers guidance

WEEE is the somewhat unfortunate acronym standing for Waste Electrical and Electronic Equipment.

It is the fastest growing waste stream in the UK with around 1.8 million tonnes generated every year.

Regulations aim to reduce the amount of this waste going to landfill and improve recovery and recycling rates. All businesses will produce some WEEE since it covers a broad range of goods.

This includes large appliances such as

washing machines, fridges and freezers; while toasters and food processors, IT and telecommunications equipment come under the small appliance range.

Consumer equipment covers radios; lighting, electrical and electronic goods; toys, leisure and sports equipment; medical devices; monitoring and control equipment, as well as automatic dispensers such as vending machines

Hazardous waste is the term for anything that may be harmful to human

health or the environment.

It must be treated before it can be sent to landfill. Treatment means physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste.

It is then made safer to handle and easier to recover, while reducing its volume and its hazardous nature.

Any business generating more than 500kg of hazardous waste per annum is required to register with the Environment



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Electrical equipment is the fastest growing waste stream

Agency and must show that it is disposing of waste through the correct channels using specialist waste management businesses such as Cawleys.

CUTTING NEGATIVE IMPACT

In January 2007 the WEEE directive was introduced with the aim of minimising the negative impact of electrical and electronic goods on the environment, by increasing reuse and recycling and reducing the amount of WEEE going to landfill.

The directive seeks to do this by making producers responsible for financing the collection, treatment and recovery of waste electrical equipment, and by obliging distributors to allow consumers to return their waste equipment free of charge.

Importers, rebranders and manufacturers of new electrical equipment have to comply with WEEE regulations as do businesses with electrical or electronic equipment to dispose of.

Some WEEE falls into the Hazardous Waste category for example white goods such as fridges and freezers are classified as hazardous waste because they contain dangerous refrigerant - ozone-depleting substances (ODS).

These must be disposed of with care

and in an environmentally-friendly manner, requiring a detailed paper trail involving consignment notes to trace their route.

Although manufacturers stopped using CFCs in 1994, they continued to use similarly environmentally-damaging HCFCs for several years after that.

The 10 to 15 year average lifespan of a refrigeration unit means that even today, many fridges being disposed of contain at least one kind of ODS.

FOAM BLOWING AGENTS

As a guide, if the unit was made before 2000, it probably has either CFCs or HCFCs somewhere in its insulating foam or refrigerant. Both CFC refrigerant and HCFC foam blowing agents need to be disposed of in an environmentally-friendly manner, and fall within the scope of regulations.

The recycling process for fridges and freezers has several stages, designed to ensure all ODS are safely removed from old fridges and freezers before their metal parts are scrapped.

The coolant is drained and the compressor removed and also drained. The coolant, containing CFCs or HCFCs, is then disposed of according to standard procedures for each chemical.

The compressor is sold for re-use – once drained it is environmentally "safe".

The equipment is shredded in a sealed environment. Various types of metal, together with plastic and insulating foam are the result.

The insulating foam is separated from the other waste, and is crushed to a powder under vacuum; a process enabling all remaining ODS to be drawn off, for recycling. The scrap metal, plastic and foam powder are separated and sold or processed for reuse.

WEEE and Hazardous Waste should be handled only by specialist waste management businesses, such as Cawleys, who can offer producers certification as evidence of 100% compliance with regulations.

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For more information log on to:
www.netregs.gov.uk and
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