

7.01 HAZARDOUS WASTE DISPOSAL



Hazardous waste is a growing part of the waste stream. Computers and other electronic and electrical devices contain hazardous substances as do batteries and light bulbs.

So what are the hazards and how do we deal with them? The main hazards in the home are electrical items, batteries, and light bulbs. Paints, inks and garden chemicals may also contain hazardous substances. Batteries and electrical equipment may contain lead, cadmium, nickel, lithium, zinc, or mercury. All these are hazardous yet valuable metals, which may be recycled if not they can enter the soil or water and thereby enter the food chain.

These elements can remain in tissues and accumulate as organisms grow or are eaten by others. Highest relative quantities of mercury are found in swordfish, tuna, seals, dolphins and other top predators. Fluorescent and compact fluorescent (low energy) light bulbs also contain mercury. However recycling systems can recover over 98% of mercury from these sources and facilities exist throughout the UK. Safe storage of old fluorescent tubes and batteries is suggested such as in a plastic storage box or tube and collection or recycling. Old computers and electronic waste may also be stored and recycled. Remember some items may still be of use and could be sold or passed onto charities.



Main hazardous materials, their sources and their effects on the environment:

Mercury, Lead, Cadmium

Fluorescent tubes, rechargeable and single use batteries. Responsible for neurological and genetic disorders

Manganese

Comes from dry cell batteries and fertilizers and in significant quantities can effect the brain, liver, reproductive system and skin

Coltan (Niobium & Tantalum)

Used in capacitors, mobile phones and circuit boards. As 80% originates from the Congo it has been indirectly responsible for the deaths of over 4 million people since 2001.



Did you know?

In the UK we throw away at least 1 million tons of electronic equipment a year, including 2.5 million fridges and 5 million television sets. It is estimated this figure could be growing by as much as 80,000 tons a year. In the UK we recycle 17% of our waste. Some European countries recycle 60% of their waste.

Where do batteries go to be recycled?

Many retail units have a battery recycling point in addition there are local authority collection points. Areas with waste to energy plants MUST recycle batteries with the local community to avoid batteries and heavy metals entering the atmosphere. This is why many parts of Europe pioneered battery recycling in the 1990's. The UK remains one of the poorest in Europe.

Where do electrical goods go to be recycled?

As part of the WEEE directive all electrical retail units are required to take back redundant electrical goods. www.letsrecycle.com/legislation/weee/efridge.jsp
The Industry Council for Electronic Equipment Recycling (see links) has a database of recycling companies, many waste disposal companies offer a service linking to these recycling facilities. Some items (PC's etc) may be passed on to charities and some go to help developing countries.

Web Links

Waste and Resources Action Programme – www.wrap.org.uk
Online source on waste management - www.wasteonline.org.uk
Industry Council for Electronic Equipment Recycling www.icer.org.uk
If you wish to check if some of your waste is hazardous see www.nhhwf.org.uk