

HAZARDOUS WASTE

Hazardous Waste

Hazardous waste can be defined as a solid waste or a combination of wastes, which because of its quantity, concentration, physical, chemical, or infectious characteristics poses a substantial or potential hazard to human health or the environment when not properly treated, stored, transported, disposed of or managed correctly.

For a waste to be classed as hazardous it must exhibit one of the following properties

- 🔄 Explosive
- 🔄 Corrosive
- 🔄 Oxidising
- 🔄 Infectious
- 🔄 Flammable
- 🔄 Toxic for reproduction
- 🔄 Irritant
- 🔄 Mutagenic
- 🔄 Harmful
- 🔄 Ecotoxic
- 🔄 Toxic
- 🔄 Residuary hazardous property
- 🔄 Carcinogenic

Hazardous wastes can be found in a wide variety of products over a broad range of activities. Such activities may include the following:

Activity Products

Activity	Products
Car Maintenance	Waste oils, brake fluids, batteries, cleaning agents
Cleaning	Cleaning solvents and agents
Printing	Inks, paints and dyes
Wood treatment	Preservatives, paints, cleaners, glues
Garden	Biocides, weed killers, fertilisers
Metal treatment	Acids, alkalis
Agriculture	Pesticides, medicines, sheep dips
DIY	Paints, solvents
General	Fluorescent tubes, lubricating oils, cleaners, medicines

Hazardous wastes should be recycled as if not properly managed they can be detrimental to human health and the environment. They can cause problems such as:

- 🔄 Contamination of water supplies;
- 🔄 Pollution of land, air and water, which may endanger human and animal health;
- 🔄 Can cause fires or toxic fumes;
- 🔄 Dumping of hazardous waste is illegal and can result in fines and lead to costly clean up operations;
- 🔄 Mixing hazardous waste with non-hazardous waste for disposal ultimately causes problems with collection systems and then disposal in landfills. It can also put workers' health at great risk and **is illegal**.



HAZARDOUS WASTE

How to Reduce Hazardous Waste

1. Only the amount of the product needed should be purchased. This is to avoid excess wastage and storage of large quantities of the product.
2. The useful life of the material should be maximized before discarding it.
3. The hazardous waste should be managed properly.
4. To reduce hazardous waste read the labels of products when purchasing and try to select the least hazardous product.
5. Non-toxic cleaners can be purchased.
6. Water-based products should be chosen where possible over solvent based products e.g. water based paints, glues.
7. Instructions should always be read carefully and followed.
8. Products should be handled with care to reduce any unnecessary spills.
9. Any excess product, spills or drips should be returned to the storage container immediately.

The Hazardous Waste Regulation provides a framework for the management and disposal of hazardous waste. The main significance of the Regulations is that hazardous waste producers are required to keep records of hazardous waste on their premises and have it properly disposed of – not mixing it with non-hazardous waste.

How to Reuse Hazardous Waste

1. Oil-based paints are hazardous as they contain heavy metals and are flammable. These can be collected for reuse as a fuel for industry.
2. Water based paints such as varnishes, stains, sealers etc. may contain mercury and so therefore are classed as hazardous. They can be recycled into latex-based paints.

How to Recycle Hazardous Waste

Recycling involves collection of the waste for reuse or for converting the waste into a new product that is no longer hazardous. The following are some recycling options that could be followed.

1. Hazardous waste should always be collected and disposed of through a reliable hazardous waste management company with a valid waste carriers licence and waste management licence.
2. Fluorescent lights are considered to be hazardous as they contain mercury and must be diverted from landfills. Therefore they should be collected by a waste collector who is specialised in Hazardous Waste Collection and who has the relevant waste collection licence.
3. Batteries and vehicle batteries are hazardous waste as they contain sulphuric acid and lead.
4. Used oils such as fluid oils can be recycled. This should never be disposed of in sewers or drains.
5. Separate hazardous chemicals from non hazardous chemicals. If the two are mixed, then the waste will have to be treated as hazardous.

Disposal of Hazardous Waste

1. The cost of disposal is potentially very expensive.
2. Some types of hazardous wastes that cannot be recycled are incinerated.

Disposal is the very last option to consider especially as the number of licensed landfills that can take hazardous waste in England are extremely limited.

