

Landfill Directive

In the UK, the European Landfill Directive (1999/31/EC) has been implemented through:
The Landfill (England and Wales) Regulations 2002 (as amended)

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- The Landfill (Scotland) Regulations 2003 (as amended)
- The Landfill Regulations (Northern Ireland) 2003

The aim of the Directive is to 'reduce as far as possible negative effects on the environment during the lifecycle of landfill'.

The Regulations require:

- Sites to be classified as either "hazardous", "non-hazardous" or "inert" according to the type of waste they will receive
- Higher engineering and operating standards
- Hazardous liquids, flammable, corrosive, explosive, oxidising and infectious wastes have been banned from landfill from July 2002
- Non hazardous liquid were banned from 30 October 2007
- Co- disposal has been banned from 16 July 2004
- Whole tyres were banned from 2003, and shredded tyres from 2006
- Waste to be required to be pre-treated prior to landfilling
- Operators must demonstrate that they and their staff are technically competent to manage the site, and have made adequate financial provision to cover the maintenance and aftercare requirements.

Implications of the Regulations Requirements

Non-Hazardous Waste Landfills

From July 2002 these sites were permitted only to accept non-hazardous liquid and solid wastes. Stabilised non-reactive hazardous waste will be permitted in separate cells provided the leaching characteristics are similar to non-hazardous wastes. From 30 October 2007 pre-treatment of non hazardous waste was required and liquid waste was banned from non-hazardous sites.

Hazardous Waste Landfills

From July 2002 these sites ceased to accept liquid, flammable, corrosive, explosive, oxidising and infectious wastes. Hazardous waste is any waste on the EU Hazardous Waste List. Since July 2005 Hazardous waste destined for landfill has had to be pre-treated meet the Waste Acceptance Criteria (WAC) specified in the Landfill Regulations as amended.

Hazardous cells in non-hazardous sites

The regulations allow separate cells to be engineered in non-hazardous sites for the management of stable, non-reactive hazardous wastes. It is likely that such wastes will have to be solidified to "lock in" the hazardous components. These wastes must be kept separate from other wastes and display leaching characteristics no worse than non hazardous waste.

Waste Treatment

The Directive requires that almost all waste must be treated prior to landfilling with treatment being defined as a physical, thermal, chemical or biological process that must change the characteristics of the waste in order to reduce its volume or hazardous nature, or facilitate its handling, or enhance its recovery.

Landfill Engineering, Emissions and Risk Assessment

Minimum requirements of geological and artificial barriers to protect soil and groundwater are prescribed in the Regulations but the Agency is able to exercise discretion to modify the lining and gas and leachate management requirements on the basis of risk assessment. Under the Regulations, all sites accepting biodegradable wastes will have to install gas collection and utilisation systems (or flaring where utilisation is not technically practicable).

Inert sites

Inert waste sites will only accept wastes that meet the new more stringent definition of inert waste.

European Waste Catalogue (EWC)

The Landfill Regulations require that waste is described by EWC codes on the Transfer Notes required under the Duty of Care Regulations. The EWC categorises wastes into 20 main groups and approximately 900 codes. The EWC also identifies Hazardous Wastes, many of which were previously classed as Special Waste and dealt with by the Special Waste Regulations, but some of which were not, such as fluorescent tubes, certain batteries and Cathode Ray Tubes.

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