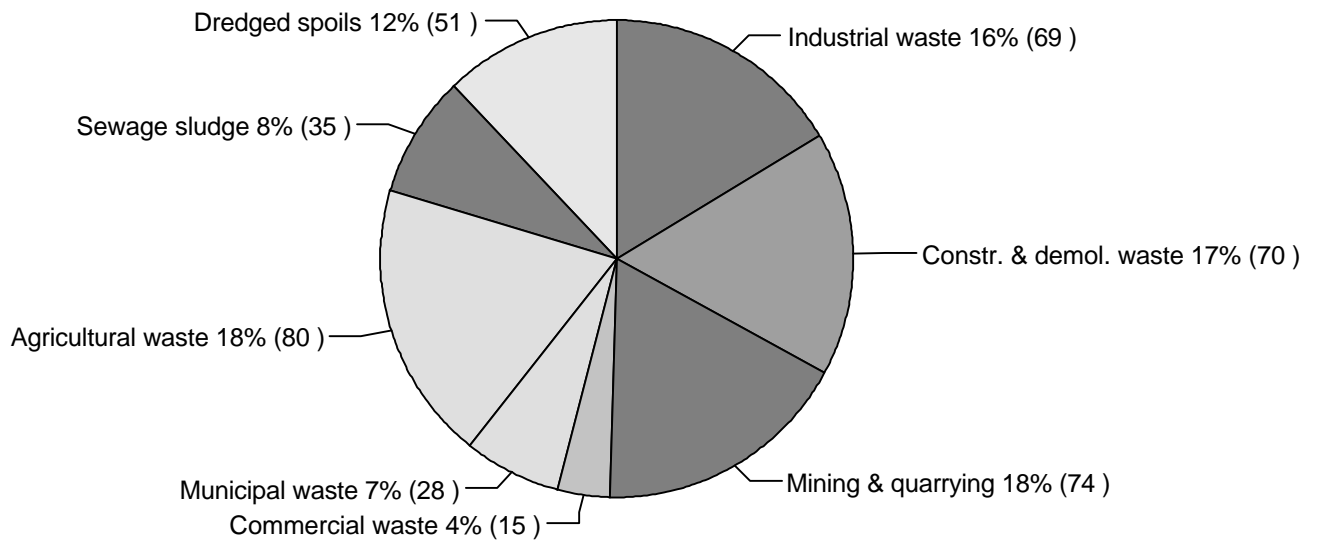


## Waste streams in the UK



**Figure 1 - Estimated waste arisings by sector in millions of tonnes, 1998** <sup>[2]</sup> [constr. & demol. waste = construction and demolition waste - NB: hazardous waste and clinical waste are not represented in this chart; they represent less than 2% of total waste arisings].

This briefing looks at the various waste streams in the UK, including municipal waste, commercial waste, industrial waste, agricultural waste and hazardous waste.

Friends of the Earth believes that all waste streams offer opportunities for minimisation /recycling but campaigns mainly on municipal waste because, although this type of waste only accounts for 7% of the total waste produced, our consumption of goods and products drives much of the waste produced in gathering and processing the resources to make them. It has been estimated that for every tonne of products we buy, ten tonnes of resources have been used to manufacture them <sup>[1]</sup>

### Controlled wastes

Controlled wastes include municipal, clinical, commercial and industrial wastes, together with sewage sludge, dredged spoils and construction and demolition wastes. Controlled wastes are wastes which must be managed and disposed of in line with waste management regulations and other waste related regulations. They are so called because they were first regulated under the Control of Pollution Act 1974. They are now subject to regulation under the Environmental Protection Act 1990 and the Environmental Protection Act (Controlled Waste Regulations) 1992. Other wastes, eg wastes from agriculture or radioactive wastes, are subject to control or regulation under separate legislation and are therefore excluded from the definition of controlled wastes.

Most controlled wastes - except for waste collected from households and certain animal wastes, which are specifically exempted - are subject to the Duty of Care requirements. The Duty of Care requirements say that all reasonable steps must be taken to keep waste safe. They apply to anyone who imports, produces, carries, keeps, treats or disposes of waste. Everyone subject to the duty of care has a legal obligation to comply with it and there are severe penalties for failing to do so [3][4].

### Municipal waste

Municipal waste includes all waste under the control of local authorities or agents acting on their behalf, which means all household waste, street litter, waste delivered to council recycling points, municipal parks and garden wastes, council office waste, civic amenity site waste, and some commercial waste from shops and smaller trading estates where local authority waste collection agreements are in place [3]. For a breakdown of waste management methods for municipal waste, see table 1.

### Household waste

Household waste is defined in the Environmental Protection Act 1990, supplemented by the Controlled Waste Regulations 1992. It includes waste from household collection rounds, bulky waste collection, hazardous household waste collection and separate

**Table 1 - Waste management for municipal, industrial and commercial waste in England & Wales, 1998/1999**  
[3]

Type of waste	Landfill (%)	Recovery <sup>3</sup> (%)	Recycling/Composting (%)
Municipal waste <sup>1</sup>	83	17	9
Industrial waste <sup>2</sup>	47	45	39
Commercial waste	66	33	29

(1) waste collected by or on behalf of the local authority

(2) excluding construction and demolition waste

(3) including recycling and composting

garden waste collection, plus waste from services such as street sweeping, litter and civic amenity sites. The definition also covers waste from schools [3].

### Business waste

Business waste covers commercial wastes and industrial wastes. Generally, businesses are expected to make their own arrangements for the collection, treatment and disposal of their wastes. Waste from smaller shops and trading estates where local authority waste collection agreements are in place is treated as municipal waste. The Environment Agency is responsible for keeping track of the volume of business waste [3].

### Commercial waste

Commercial waste is waste arising from wholesalers, catering establishments, shops and offices and includes paper, cardboard, metals, glass and food [3]. For a breakdown of waste management methods for commercial waste, see table 1.

### Industrial waste

Industrial waste is waste arising from factories and industrial plants and includes metals, scrap equipment, mineral waste and chemicals. In this definition, it does not include construction and demolition waste [3]. For a breakdown of waste management methods for industrial waste, see table 1.

### Construction and demolition waste

Construction and demolition waste arises from the construction, repair, maintenance and demolition of buildings and structures. It mostly includes brick, concrete, hardcore, subsoil and topsoil, but it can also include quantities of timber, metal, plastics and (occasionally) special waste materials [3].

A study published in 1994 (*in* [3]) found that 29% of construction and demolition waste was used on-site or sold off-site (possibly after coarse crushing), 30% was used for landfill engineering and 30% was deposited at landfill. Only 4% was crushed to a graded product and the remaining 7% was disposed of illegally or used for agricultural purposes [3].

### Sewage sludge

Sewage sludge is an inevitable by-product of sewage treatment. It is produced at sewage works as a thick odorous liquid containing around 4% solid matter.

50% of sewage sludge is spread on agricultural land, 8% is incinerated, 8% is sent to landfill sites, 6% is used for

land reclamation, 3% is used on dedicated sites and the rest is disposed by other methods. Sewage sludge must be treated before it is used in agriculture in order to reduce odour, volume and, increasingly, pathogen levels [3]

### **Dredged spoils**

Dredged spoils consist of the sediments left over from dredging aggregates (hard rock, sand and gravel) from estuaries or coastal areas [5][6].

### **Hazardous waste/special waste**

Hazardous waste (called 'special waste' in UK legal documents) is defined in the Special Waste Regulations 1996 which implement the Hazardous Waste Directive (91/689/EEC) and can be broadly summarised as follows:

- a waste on the EC Hazardous Waste List displaying hazardous properties;
- any other controlled waste displaying defined properties, such as flammable, toxic or irritant;
- waste prescription only medicines [3].

Hazardous waste can be found in any of the other waste streams described in this briefing.

Hazardous waste in England & Wales has been estimated to be 4,846,000 tonnes in 1998-1999 [3].

In 1998/9, 47% of hazardous waste was disposed of to landfill. Details on the proportion of other waste management used, including incineration, re-use, and recycling, are not currently available [3].

### **Clinical waste**

Clinical waste is defined in the Controlled Waste Regulations 1992 as:

- human and animal tissue, blood, other bodily fluids, excretions, drugs and other pharmaceuticals.
- swabs, dressings, syringes, needles or other sharp instruments, which unless rendered safe may prove hazardous to any person coming into contact with it.
- any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, from investigation, treatment, care, teaching or research, or from the collection of blood for transfusion (being waste which may cause infection to any person coming into contact with it) [3].

Clinical waste in the UK has been estimated to be in the

range of 100,000–200,000 tonnes per year [3].

Some clinical waste is classified as special waste, for instance waste from prescription-only medicines. These wastes are subject to additional controls under the Special Waste Regulations [3].

## **Other wastes**

### **Agricultural waste**

Agricultural waste is any waste from a farm or market garden, and includes organic matter such as manure, slurry, silage effluent and crop residues, but also includes packaging and films, and animal treatment dips (for example sheep dip). At present, waste from premises used for agriculture is excluded from the definition of controlled waste, and hence is not subject to the waste management licensing regulations, or other waste controls such as the Duty of Care and registration of carriers. Waste Strategy 2000 announced that these controls are to be extended to agricultural waste - except waste re-used on land [3].

Various agricultural wastes are disposed of in different ways: farm by-products such as manures and slurry can be applied to land; farm plastic films (used for packaging), or non-packaging farm plastics need to be disposed of off-farm (recycled preferably) under Waste Strategy 2000 [3].

### **Mine and quarry waste**

Mine and quarry waste includes materials such as overburden<sup>1</sup>, rock inter-bedded with the mineral, and residues left over from initial processing of the extracted material into saleable products. Mine and quarry waste is either tipped locally, used for infilling prior to restoration of land or re-used [3].

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<sup>1</sup> this is a term used in quarrying, which refers to useless material which overlies a bed of useful material  
(see: [www.brookes.ac.uk/geology/stonerof/glossary.html](http://www.brookes.ac.uk/geology/stonerof/glossary.html))

## References

1. Jones, P., 1995, Mass balance and the UK economy, Biffa Waste Services
2. DETR, 1998, *Digest of Environmental Statistics* No. 20, [www.detr.gov.uk/environment/des20/chapter0/2.htm#chapter7](http://www.detr.gov.uk/environment/des20/chapter0/2.htm#chapter7)
3. DETR, 2000, *Waste Strategy 2000*, [www.environment.detr.gov.uk/waste/strategy/cm4693/index.htm](http://www.environment.detr.gov.uk/waste/strategy/cm4693/index.htm)
4. DETR, 1997, *Indicators of Sustainable Development for the United Kingdom*, [www.detr.gov.uk/environment/epsim/indics/isdv02s.htm](http://www.detr.gov.uk/environment/epsim/indics/isdv02s.htm)
5. DETR, 2000, *Planning for the Supply of Aggregates in England*, [www.detr.gov.uk/planning/consult/aggregates/supply/summary.htm](http://www.detr.gov.uk/planning/consult/aggregates/supply/summary.htm)
6. DETR, 2000, *PAHs in Harbours*, [www.detr.gov.uk/environment/marine/mlis/summaries/11.htm](http://www.detr.gov.uk/environment/marine/mlis/summaries/11.htm)

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