

## 1 PACKAGING REGULATIONS IN BRIEF PACKAGING WASTE DIRECTIVE (94/62) 1994

Environmental objectives:

- Reduce over-packaging;
- Eliminate certain heavy metals;
- Provide consumers with information;
- Reduce packaging waste going to landfill and increase recovery and recycling; and
- Put recovery /recycling burden on producers.

## 2 PRODUCER RESPONSIBILITY OBLIGATIONS (PACKAGING WASTE) REGULATIONS 2003

Applicable only to companies that handle (in a broad sense) over 50t of packaging and have a £2m+ annual turnover. They need to register with:

- The Environment Agency or
  - a registered compliance scheme
- and are required to take responsibility for recovery and recycling of their obligation based on:
- Total amount they handle
  - Activity related (manufacturer 6%; converter 11%; packer/filler 36%; seller/retailer 47%)
  - UK targets of recovery/recycling

To provide a paper trail, recyclers and recovery companies issue Packaging Recovery Notes (PRNs or PERNs for export of waste) for every tonne of packaging waste they handle. Companies and compliance schemes must obtain these PRNs to prove that they meet their recycling targets. PRNs can be traded and have a (fluctuating) market value.

## MINIMISE YOUR OBLIGATION BY REDUCTION OR RE-USE OF THE PACKAGING YOU HANDLE

## 3 PACKAGING (ESSENTIAL REQUIREMENTS) REGULATIONS 2003

These regulations aim to minimise waste packaging by design and specification, taking into account safety, hygiene and consumer acceptance. They also prescribe maximum permitted levels of heavy metals and that packaging must somehow be recoverable. Applicable to packers/fillers or importers of packaging and companies that claim to have done so by putting their name on the packaging. Regulations are also relevant to specifiers, designers & producers of packaging and apply regardless of turnover and quantities of packaging manufactured.

## LEGISLATION AND REGULATIONS RELEVANT TO PACKAGING WASTE

- Duty of Care Regulations (EPA 1990 Section 34) (*Issue 2 of Series 1*)
- Hazardous Waste Regulations and the European Waste Catalogue - EWC (including the Hazardous Waste List) (*Issue 3 of Series 1*)
- Landfill (England and Wales) Regulations 2002
- Packaging Waste Directive (94/62)
- Producer Responsibility Obligations (Packaging Waste) Regulations 1997
- Packaging (Essential Requirements) Regulations 2003)

### SOURCES OF INFORMATION

DEFRA Central Government

[www.defra.gov.uk](http://www.defra.gov.uk)

Environment Agency Wales REGULATOR AND LICENSING

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

NetRegs legislation explained

[www.environment-agency.gov.uk/netregs](http://www.environment-agency.gov.uk/netregs)

Waste Resources Action Plan

[www.wrap.org.uk](http://www.wrap.org.uk)

Envirowise - (free) environmental advice

[www.envirowise.gov.uk](http://www.envirowise.gov.uk)

Waste Exchange - free service from Arena Network

[www.waste-exchange.org](http://www.waste-exchange.org)

ValPak - Packaging Compliance

[www.valpak.co.uk](http://www.valpak.co.uk)

N.B. BRASS is not responsible for the content of external internet sites

Each week a different sector of industry or waste type will be discussed in these briefing notes, which can be downloaded from the website below.

N.B.: These notes are merely a guidance and should not be considered as advice from any of the parties contained within this leaflet.

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## MANAGEMENT OF PACKAGING WASTE



In this third and final series of business briefing notes published by the BRASS Centre attention is focussed on specific types of waste. General issues concerning the management of packaging waste are addressed and some basic guidance is provided. Issue 1 of Series 3 highlights the management of 'general packaging waste', a major component of most businesses' waste output and source of management problems and concerns. This leaflet is based on data gathered from the National Waste Survey 2003-2004.

## COMMON TYPES OF PACKAGING WASTE

Most companies dispose of packaging waste, from boxes, bottles, milk cartons, food wrappers to pallets, oil drums and paint tins. A list of packaging wastes and European Waste Catalogue codes are:

- **Cardboard and paper** - boxes, cores, bags, drums, filler, moulds 15 01 01
- **Plastic** - bottles, tubs, drums, bubble wrap, shrink wrap, filler, moulds 15 01 02
- **Wood** - pallets, crates 15 01 03
- **Metal** - tins, cans, drums 15 01 05
- **Composites** - combined materials e.g. waxed paper, plastic lined metal 15 01 05
- **Mixed** - mixtures 15 01 07
- **Glass** - bottles 15 01 07
- **Textile** - Hessian bags, sacks 15 01 09
- **Contaminated** - any of the above containing hazardous residues 15 01 10\*

## WASTE PACKAGING: PAYING OUT OR CASHING IN

Packaging waste is usually generated in two ways;

- as a result of the production process; and/or
- as product or transit packaging - coming in with the supply of resources.

This waste will cost you and your company money and has a negative impact on the environment. Most companies have to comply with packaging regulations (see below). If packaging becomes waste, the cost will be effected by the following:

- The increasing price of transport, treatment and disposal of waste to landfill;
- The price of lost resources;
- The cost of staffing; and/or
- The price of compliance for example by not producing more than 50 tonnes of packaging waste.

Sound waste management will help you to comply with regulations and also may improve your company's public image:

- stakeholders increasingly demand sound environmental practices;
- company image affects employee morale and shareholder perception;
- environmental performance impacts on risk assessment and insurance issues.

## HOW TO MANAGE PACKAGING WASTE

There are a number of ways to reduce cost of disposal of your packaging waste.

**MINIMISATION** is at the top of the waste hierarchy and landfill is at the bottom. This means reducing the amount of waste generated from all company activities. Some examples of cost effective minimisation are outlined below:

**Case 1:** A producer of aluminium implemented an example of 'lightweighting':

*"...we have reduced the thickness of the plywood we use in our crates. It's cheaper, produces less off-cut waste and less waste with our customers..."*

**Case 2:** A manufacturer of concrete bricks:

*"... we stack our finished product in such a way that we can handle a pack with the forklift. We no longer need pallets to store and transport our products..."*

**Case 3:** Other companies mentioned the practice of *shrink bundling*. (Bundling products with recyclable shrink wrap rather than in boxes or crates that are much heavier and more voluminous).

Other **minimisation** initiatives you can take:

- Ask your supplier to reduce the amount of packaging they use;
- Buy raw materials in bulk for a better volume to weight packaging ratio;
- Use bulk storage instead of drums;
- Prevent damage, contamination, unwanted stock by limiting amount to order; and/or
- Set your copiers and printers to 2-sided printing by default.

**RE - USE** of packaging waste

- Ordering and using standard sized packaging encourages re-use through the supply chain (e.g. 80 x 100cm/100 x 120cm pallets, 45gal drums, 1000ltr IBC);
- Ask suppliers for re-usable packaging;
- Use metal crates, stillages or other types of re-usable packaging;
- Use liners to protect drums and make re-use, reconditioning or recycling possible;
- Drain and wash (in an appropriate way) contaminated drums, bottles, buckets to make re-use, reconditioning or recycling possible;
- An oil drum is worth £15; a pallet can fetch £1 - 1.50; a tonne of cardboard up to £50.

## HOW TO MANAGE PACKAGING WASTE (CONT'D)

**RECYCLING** is a sustainable way to keep waste out of landfill sites and save on disposal cost. To make recycling more viable here are some considerations:

- **Quantity** Mileage per tonne - your re-usables and recyclables are more interesting to buyers if you can offer them in quantity: increase volume (store and stockpile) ensuring to comply with duty of care commitments; increase density - more units per tonne (stack, flatten).
- **Quality:** If you can add quality to your waste packaging (separation, cleaning, draining, dry storage) you will increase the value; remove staples, tops, tape, glue, pouches before putting packaging in the recycling bin.

A lot of packaging waste can be sold or removed free of charge to be recycled (depending on market rate). It can save on disposal cost. With a few easy initiatives you can increase the value of your waste.

- **Buy recycled product as much as possible** help to develop markets for recyclables;
- **Source separation** (use colour coded bins), will help to raise staff awareness;
- Provide proper (dry) storage to stockpile, e.g. use lockable front-end-loaders instead of open skips (see Duty of Care Leaflet);
- To increase volumes try to recycle together with neighbours or use the supply chain to recycle; return packaging back to suppliers;
- Use and specify (compostable) cardboard, paper and/or wood for mouldings and pack filler —avoid polystyrene or polyurethane;
- Consider baling and **bringing** your waste packaging to recyclers and re-users.

## A BALING MACHINE/COMPACTOR

It might be in your interest to invest in a baling machine. Their use reduces the volume of low density waste (cardboard, plastic, metal) to about 20%, decreasing the miles-per-tonne ratio. These machines are expensive but they can help to save money. They are available in all shapes and sizes. What you need is a waste audit (see series 2 Leaflets) and good advice.

## GENERAL

Landfill should be the last resort for your packaging waste. If all other options fail than landfill is what's left.