

Used Lamp Recycling / Re-Use

Re-Use v Landfill

Issues	Re - U s e	L a n d f i l l
Best Environmental Practice	Y E S	N O
W a s t e H i e r a r c h y	Y E S	N O
S u s t a i n a b l e E n v i r o n m e n t	Y E S	N O
L e g i s l a t i o n C o m p l i a n c e	Y E S	N O
C o m p l i a n c e t o I S O 1 4 0 0 1 & E M A S	Y E S	N O

Why Recycle ?

- 100,000,000 Plus - Lamps are Landfilled Annually in the UK
 - (this includes both Fluorescent & Sodium Lamps)
- This is equivalent to 12000+ tonnes or 4+ tonnes Mercury (Hg)
- **There is sufficient Mercury (Hg) in 1 fluorescent lamp to contaminate up to 30,000 litres of Drinking Water above Safe Drinking Limits**
- Mercury & Other Metals are a valuable resource
- Sodium in contact with water reacts violently and can cause fire
- It avoids risks of contamination
- Avoids cutting resulting from broken glass

Impact of Legislation on Used Lamps

■ Landfill Directive

- NO hazardous goods are allowed to be Landfilled, except in Hazardous Waste landfill sites.
- Number of Hazardous Landfill sites are to be decreased to about 15 from approximately 250

■ Waste Electrical & Electronic Equipment (WEEE) Directive

- Requires all waste electrical and electronic equipment to be recycled and includes used fluorescent and sodium lamps
- Such lamps contain hazardous products such as Mercury, cadmium and sodium

■ Pollution Prevention & Control Regulations 2000

- These regulations place a requirement on "permitted" operators to minimise the environmental impact of their wastes, which includes used lamps

Process for Re-Use

- Suitable for All Mercury, Sodium, Halogen Lamps
- Must Be Complete
- NO PACKAGING
- All Sizes and Shapes, including "Safe Break"
- Separates into Individual Components
- All components are RE-USED



Process for Re-Use

How it Works

Solwaste Collects Used Fluorescent
& Sodium Lam ps

Used Lam ps Segregated and Sorted

Used Lam ps Processed via Separation &
Sieve Mechanism and Segregated into By-
Products

Liquid Mercury Distilled from Phosphor
Powder

By-Products Dispatched as Raw Materials
or for Further Processing

USED LAMP RECYCLING PROCESS for Complete Lamps:

CRUSHER

SEPARATOR

Phosphor powder, mercury

Metal(Aluminium, Lead)

Glass

Chemical Separation

Phosphor Powder

Mercury

Distillation Steps

Purified

Mercury

RE-USED

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RE-USED



Benefits of Re-Use

- **NO LAND-FILLING**
- **Legislation Compliance**
- **100% Re-Use or Recycling**
- **ISO 14001 or EMAS compliance**
- **Commitment to a More Sustainable Environment**



What Solvowaste Offer

- Licensed Site for Handling up to 80000 used lamps at any time
- Economies of Scale for Reprocessing
- Proof of Re-Use and Full Traceability
- Competitive Rates based on Quantity
- Full Technical Back Up
- Carrier Round Collections
- Flexible Service to meet Demands
- Supply of Specifically Designed Containers
- Training of Site Operatives for loading containers