



Safety Note 44

Low Energy Light Bulbs

Introduction

This safety note gives advice on the correct disposal of low energy light bulbs, and the safety precautions to be followed, in the unlikely event of a low energy bulb being broken.

The use of the traditional tungsten light bulb is gradually being phased out in the UK, and therefore over time more light bulbs within the University will become Compact Fluorescent Light bulbs (CFLs), often referred to as energy saving light bulbs. CFLs, like fluorescent light bulbs, contain a small amount of mercury (5-8 milligrams) which is low in comparison to the amount traditionally found in mercury thermometers (3 grams). The mercury cannot escape from an unbroken bulb. In the event of breakage, the very small amount contained in an energy efficient bulb is unlikely to cause harm.



Like all household products energy efficient bulbs can break, but they are actually harder to break than traditional bulbs: they are often coated with plastic as a protector and as they're of a smaller diameter than traditional bulbs they have higher stress limits.

Disposal of low energy light bulbs

Low energy light bulbs are classified as Waste Electronic or Electrical Equipment (WEEE) and therefore must never be disposed of to landfill. Manufacturers of CFLs have to pay for their treatment and recycling and therefore a retailer should inform the customer of the disposal arrangements if requested (either return to store for recycling or the location of the nearest designated collection facility, normally run by the local council). Within the University, Campus Services provide a collection facility.

Cleaning up a broken low energy light bulb

As with any mercury spill, if a bulb becomes broken, the room should be vacated and ventilated for 15 minutes. Do not use a vacuum cleaner – but wearing rubber gloves, use a dust pan and brush to sweep up all particles and glass fragments. This will also avoid the risk of glass cuts. Light strokes should be used, and try to avoid inhaling airborne dust. The glass fragments, gloves, dustpan and brush should be placed in a plastic bag. Wipe the area with a damp cloth, then add that to the bag and seal it. The sealed plastic bag should then be placed in a cardboard box, marked as containing hazardous waste and broken glass. The cardboard box should not be disposed of in the normal waste collection. Instead you should contact Campus Services via the FMD Helpdesk extn. 7000, or raise a Wren on Wren Web to arrange for disposal/recycling.

If in doubt -

Contact your Area Health and Safety Co-ordinator, or Health and Safety Services on ext. 8888, or Campus Services on ext. 6927.

For more information on low energy bulbs, see defra's web site at <http://www.defra.gov.uk/environment/climatechange/uk/household/products/cfl.htm>