

# Storing hazardous wastes at household waste recycling centres

## Scope

1 The Health and Safety Executive has produced guidance on the storage of hazardous substances, primarily aimed at specialised manufacturing and bulk storage facilities.<sup>1</sup> As household waste recycling centres often receive a wide range of materials, and in relatively small quantities, this document has been drafted to provide practical guidance, using the principles set out in existing substance-specific guidance.

2 The following guidance follows those principles and specifically addresses the storage of hazardous waste at household waste recycling centres (HWRCs), also called civic amenity sites. Waste received at HWRCs is usually domestic, varied and in small quantities. So this guidance has been drawn up to give pragmatic advice.

3 This guidance considers the specific implications of household hazardous wastes at HWRC sites; it does not cover generic hazards such as manual handling, workplace transport and slips and trips.

## Introduction

4 This good practice guidance was produced jointly by the Waste Industry Safety and Health Forum (WISH) and the Health and Safety Executive (HSE) and is published by HSE. The document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do. It is aimed at designers, managers, supervisors and operators of HWRCs, and at safety professionals who may advise waste management companies.

5 The risks associated with your particular site, and the methods of reducing those risks, should be revealed during your risk assessment. This guidance has been drawn up to help inform your risk assessment process and should be used in conjunction with other publications (see References and Further reading).

6 The environment can be better protected if hazardous wastes are removed from the waste stream and treated separately by re-use, recycling, recovery or disposal. However, this process of segregation results in greater concentration of potentially hazardous waste and increased handling (with associated hazards of fire, exposure, handling etc).

7 Operators of HWRCs accepting household hazardous wastes need to understand the requirements to classify hazardous waste and its carriage on the road. To achieve this, operators will need to have access to competent advice such as a dangerous goods safety advisor (DGSA), internal company environmental law specialists and/or the Environment Agency/Scottish Environmental Protection Agency. Guidance on the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 can be found at [www.hse.gov.uk/cdg/manual/index.htm](http://www.hse.gov.uk/cdg/manual/index.htm).<sup>2</sup>

## What is household hazardous waste?

8 Household hazardous wastes cover a wide range of materials that occur in the domestic waste stream. These can include:

- gas cylinders;
- aerosols;
- batteries;
- oils;
- asbestos;
- paints and adhesives;
- flammable liquids (eg thinners and solvents);
- garden chemicals (pesticides etc);
- household chemicals;
- fluorescent tubes, cathode ray tubes etc.

## Principles of good risk management

9 HWRC operators should have procedures in place for each type of hazardous waste they handle. These should include:

- reception;
- identification;
- segregation;
- handling;
- storage;
- security and emergency procedures;
- training, instruction and advice.

10 If any of the above cannot be adequately provided for a type of hazardous waste then it should not be accepted at the site.

11 The controls described below are for the reception and storage of household hazardous wastes, not their treatment or activities such as bulking materials into larger packaging. The site waste management licence will set out permitted activities.

### Reception

12 Reception of hazardous waste provides the first opportunity to control the risk to health, safety and the environment. The list of reception systems below is a useful hierarchy for control, providing the greatest opportunity to reduce risk at the top, and the least at the bottom.

- Household hazardous waste collections – collection direct from the household by specialist, competent contractor.
- Pre-separation at the HWRC – separate containers at the HWRC to ensure that hazardous wastes do not enter the general waste stream (eg battery boxes, gas cylinder cages).
- Interception of hazardous wastes as they are unloaded by members of the public – close supervision of members of the public to enable wastes to be intercepted before they are placed in the general waste stream.
- Removal of hazardous wastes from the general waste stream – totting/picking of hazardous waste by hand.

13 For example, higher-risk hazardous wastes, such as asbestos and pesticides, can be collected from the household direct, leaving medium-level hazardous wastes, such as batteries and oils, to be deposited by the public into clearly labelled containers at the HWRC.

14 Members of the public should be clearly informed by signs, directions and guidance from staff on how each material should be handled. Local publicity may also help the public to understand the role of HWRCs and how hazardous wastes can be disposed of safely.

### **Identification, segregation and handling**

15 Identification is the key to safe management of potentially hazardous wastes.

16 The public should be asked to make site operatives aware of the presence of wastes such as asbestos, flammable liquids, pesticides and compressed gases, so that they can be appropriately handled.

17 Site workers should have sufficient competence to ensure that they can identify potentially hazardous waste and can safely handle it. Competence includes the ability to:

- identify the type of waste and its hazards;
- visually check the integrity of the packaging (leaks, damage etc);
- allocate the waste to the appropriate storage container or area;
- remove any non-conforming wastes to quarantine.

18 In most cases identification and subsequent storage will be obvious. However, employees should seek advice if a waste is not readily identifiable and place it in secure quarantine until identification can be made.

19 Site employees should not place themselves in danger when inspecting wastes. For example, if the valve on a gas cylinder is damaged and appears to be leaking, site employees should not attempt to rectify the fault but clear the area and seek assistance.

20 When inspecting potentially hazardous wastes, employees should wear suitable personal protective equipment such as eye protection, gloves and non-synthetic overalls.

### **Storage**

21 HWRCs storing hazardous wastes should have a site storage plan. This should include:

- a site plan indicating the storage locations for each waste type;
- conditions of storage (what type of containers are used to store the wastes);
- storage requirements such as daily checks on containers for leaks;
- reception and inspection procedures for specific wastes;
- handling requirements for the wastes;
- quarantine area for 'unknown' wastes and procedures for dealing with them.

22 The plan should be drawn up by a competent person/s and contain sufficient detail to ensure that employees are aware of where each hazardous waste is stored, how it is stored and how it should be handled. Plans should include details of any separation distances between containers and any other isolation systems used such as walls or sealed containers. The HSE publication *Chemical warehousing* (HSG71) provides guidance on storage plans.<sup>3</sup>

23 For many types of hazardous waste, such as gas cylinders and flammable liquids, an up-to-date inventory should be kept, for example a clipboard with a form kept in a weatherproof box at each gas cylinder cage. This information should then be available to the emergency services.

24 When hazardous substances are stored in cupboards, ensure that unsuitable classes of material are not mixed. For example, pesticides should not be stored with flammable liquids – see HSE guidance *Chemical warehousing* for full details of compatibilities.<sup>3</sup> Adequate separation within mixed-class cupboards must be in place, including separate drip/spill trays to prevent spills mixing. Separate cupboards for each class of hazardous substance will reduce the risks of incidents.

### **Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)**

25 DSEAR<sup>4</sup> puts duties on operators of HWRCs to protect people from risks to their safety from fires, explosions and similar events, and this includes members of the public who may be at risk. Many substances handled at HWRCs can create a risk of fire or explosion, these include solvents, paints and flammable gases such as liquefied petroleum gas (LPG).

26 At each site operators will need to:

- find out what dangerous substances are likely to be handled and what the fire and explosion risks are;
- put control measures in place to either remove those risks or, where this is not possible, control them;
- put controls in place to reduce the effects of any incidents involving dangerous substances;
- prepare plans and procedures to deal with accidents, incidents and emergencies involving dangerous substances;
- make sure employees are properly informed about and trained to control or deal with the risks from dangerous substances;
- identify and classify areas of the workplace where explosive atmospheres may occur and avoid ignition sources (from unprotected equipment, for example) in those areas.

### **Security and emergency planning**

27 Emergency plans should be drawn up for the foreseeable inventory of the site and employees should be competent in operating them.

28 Typical emergency arrangements will include:

- ensuring spillage containment/removal;
- providing suitable fire-fighting equipment;
- providing eyewash bottles;
- evacuation procedures and escape routes;
- contact numbers of specialist assistance, eg for damaged gas cylinders.

29 Specific emergency provision will be required for many individual hazardous household wastes. For example, lithium batteries may split in a fire, exposing the lithium in them. Lithium reacts violently with water and such fires must not be tackled with water extinguishers.

30 Escape routes should be maintained at all times.

31 A copy of the site storage plan and emergency plan should be kept in an 'emergency services box' near the gate of the site. This should include inventories of more hazardous wastes, updated on a daily basis.

32 HWRCs are often open to trespass. This should be accounted for in site emergency and storage plans. For example, containers and compounds for hazardous wastes such as gases and flammable liquids should be:

- clearly signed as to their contents and the hazard posed;
- kept secure and locked when not in use;
- constructed to resist attempts to break into them.

### ***Training, instruction and advice***

33 Handling potentially hazardous waste at HWRCs requires high levels of competence. Operatives should be trained on site storage plans, waste identification and handling and emergency procedures.

34 Risk assessment should identify the extent of such training and is likely to include:

- signs used on containers such as bottles, gas cylinders etc, for example hazard diamonds and packaging warning signs;
- physical identifying features such as container shape, construction etc;
- classes of hazardous substances, their hazards and compatibilities;
- safe systems of work and protective equipment to be worn when handling hazardous wastes;
- safe storage;
- housekeeping;
- emergency procedures.

35 Information on waste identification, such as on colour marking of gas cylinders, labelling of containers and packaging etc, must be kept on site and be readily available to employees for reference. Displaying such identification on noticeboards is good practice.

36 HWRCs that accept hazardous wastes should have access to competent, specialist advice. This may be from within the organisation or through an external adviser. HWRCs should be able to seek advice on the specific hazardous substances. Competent advice must be readily accessible to site workers, eg by prominently displaying plans in communal areas.

### ***Specific wastes and precautions***

37 The types of hazardous wastes accepted by a HWRC will often be set in the contract between the operator and the local authority. When setting this contract the safety of site employees and members of the public should be a primary consideration.

38 The following are general guidelines for some of the most common hazardous wastes accepted at HWRCs.

#### ***Gas cylinders***

39 Fire/explosion and exposure to harmful gases are potential hazards presented by gas cylinders. The contents, condition and origin of cylinders received at HWRCs can often be difficult to determine. Control measures should concentrate on inspection, handling and storage/segregation and steps to minimise inventories.

#### ***Inspecting gas cylinders***

40 Cylinders and their contents should be properly identified. Cylinder identification charts are available and can assist operators in identification and allocation to correct storage. Inspection should then consider the condition, any valve damage and the type of gas contained (flammable or other). Isolate any damaged cylinders and get advice. If you can't identify a cylinder, seek advice.

### *Handling gas cylinders*

41 When handling cylinders, you should do the following.

- Wear eye protection and gloves when moving cylinders.
- Do not lift a cylinder by its valve or valve guard.
- Do not roll cylinders along the ground (for larger cylinders use a cylinder trolley).
- Do not cut into or attempt to puncture cylinders.
- Do not drop cylinders, bang cylinders together or maltreat them.
- Do not attempt to discharge or empty gas cylinders.

### *Storing gas cylinders*

42 At least two gas cylinder cages should be available unless a larger gas cylinder cage with suitable internal firewall segregation is provided. Stores should segregate flammable gases from non-flammable and non-toxic gases.

- Gas cylinders should be stored in fully enclosed stores or solid containers with a suitably strong and secured mesh roof to prevent ejection during fire. Standard cages are available.
- Stores should be kept secure at all times except when cylinders are being moved in/out.
- Cylinders must be stored upright (unless instructions on the cylinder state otherwise).
- Stores should be clearly marked to indicate the presence of flammable materials, the types of gas stored and prohibit smoking and naked flames.
- Stores should be well drained to prevent water accumulation (corrosion of cylinders).
- Flammable gases (eg butane and propane) should be kept in one store and others such as oxidising and toxic gases in another.
- Stores should be at least 3 metres apart or separated by a suitable firewall.
- Flammable gas stores should not be located within 6 metres of any potential ignition sources such as electrical systems – see the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR).<sup>4</sup>
- Cages should not be located within 3 metres of the site boundary and should be sited/protected from impact with vehicles.
- The area around cages must be kept free of flammable materials such as paper, dry grasses and other vegetation etc.
- Inventories should be managed to keep stored quantities to a minimum.
- Acetylene cylinders should be isolated from all other gases, in a separate cage and removed from site as soon as possible – acetylene fires are extremely energetic.

### *Disposal of gas cylinders*

43 The inventory of cylinders should be actively managed to limit the quantities stored. Various schemes are in place, such as the Liquefied Petroleum Gas Association's (LPGA's) cylinder retrieval scheme. Some companies also specialise in the disposal of scrap cylinders. See HSE/WISH guidance *Orphaned compressed gas cylinders in the waste and recycling industries*.<sup>5</sup>

### **Aerosols**

44 Aerosols contain less gas than larger gas cylinders. However, when stored together the cumulative volume of gas may be significant. Many aerosols use butane as a propellant and this poses a significant fire risk.

- Aerosols should be stored in a suitable ventilated container, such as a cage container or mesh stillage with a closing top.
- The container should be labelled with warning signs prohibiting smoking and naked flames.

- Aerosol containers should not be punctured, crushed or emptied. Specialist equipment is required for this and such activities may be outside the site's licence conditions.
- Do not expose aerosols to excessive heat, direct sunlight or ignition sources.
- Eye protection and gloves should be worn when handling aerosols.

### **Batteries**

45 The two main hazards associated with batteries are acid and their potential as an ignition source. Typically, HWRCs receive two types of battery – vehicle batteries (lead-acid or similar) and domestic batteries.

#### ***Vehicle and similar batteries***

46 Vehicle batteries can produce high-energy sparks and heating if shorted-out by a metal item placed or dropped across the terminals. Shorting is often violent enough to 'weld' the metal item to the battery and provide a source of ignition (it cannot be assumed that waste batteries have been discharged).

47 Lead acid batteries can also produce highly flammable hydrogen. This, combined with potential ignition by sparks should shorting occur, makes vehicle batteries very hazardous. Lead acid batteries can also split and explode if maltreated.

48 When **handling** vehicle and similar batteries, you should do the following.

- Wear a face shield, gloves and suitable clothing such as an apron or strong overalls.
- Eyewash bottles should be provided close to battery containers.
- Remove conductive items, such as bracelets, long necklaces etc before handling batteries.
- Any spillage must be cleaned up immediately using suitable absorbent granules – lead acid batteries contain strong sulphuric acid and full protective clothing including eye protection must be worn.
- Damaged batteries should be double-bagged in polyethylene bags of at least 85 micron thickness.

49 When **storing** vehicle batteries, you should take the following measures:

- Store them in a non-conductive (such as plastic) container that is fitted with a lid and well ventilated – the lid must be kept closed.
- Ensure the containers do not have drainage holes – lids should be kept down to minimise the amount of water that can get in and containers should be inspected regularly.
- Label containers 'for vehicle batteries only' and have the corrosive warning sign plus a written warning. Containers should be regularly inspected to ensure they are free from conductive objects that may cause shorting.
- Ensure batteries are not located within 6 metres of a flammable gas cage or flammable liquids containers, nor where any spillage may leak into drainage systems.
- Batteries should not be left outside of containers.
- Metal or other conductive wastes should not be placed in vehicle battery containers – this includes small domestic batteries.
- Inventories should be managed to limit quantities on site.
- Any spillage must be cleaned-up immediately using suitable absorbent granules – lead acid batteries contain strong sulphuric acid and full protective clothing including eye protection must be worn.
- Damaged batteries should be double-bagged in polyethylene bags of at least 85 micron thickness.

### *Domestic batteries*

50 Domestic batteries are those such as lithium and similar used for torches, radios etc. These are generally smaller and lower-risk than vehicle batteries. Lithium batteries exposed to water can react, releasing hydrogen and significant amounts of heat.

- Domestic batteries should be stored in non-conductive well-ventilated containers.
- Containers should have a lid (kept closed) or closed top (eg enclosed plastic 'tub' with holes in its upper side to accept batteries) – to allow ventilation and prevent water getting in.
- Entry holes in containers should be small enough to prevent vehicle batteries being placed in them.
- Containers should be clearly marked as for dry batteries only – **not** vehicle batteries.
- Containers for domestic batteries should be kept close to those for vehicle batteries (for easy use by the public), but at least 3 metres apart in case of spills from vehicle batteries.
- Battery containers must not be dropped, knocked or maltreated.
- Do not use water to fight fires that may contain lithium batteries.

51 Lithium batteries often contain a copper powder. If fires containing lithium batteries are treated with water they will release large amounts of hydrogen, making them more dangerous. Specialist advice should be sought on how to tackle fires containing lithium batteries.

### *Waste oils*

52 Waste oils, typically from home car servicing, are accepted at many HWRCs. Oils are flammable and pose a fire risk. However, the most common type of accident caused by oils are slips from spills.

- Waste oils should be stored in a suitably strong and bunded tank.
- Waste oil stores should not be within 6 metres of any gas cage or vehicle battery container. They should be bunded to prevent leaks entering drainage systems.
- Waste oil stores should be marked with a 'flammable' warning sign, it is also recommended that signs advise of the risk of slips.
- Spillage control, containment, suitable flooring and cleaning regimes can be used to reduce the risk of slips.
- Tank access hatches should be lidded and lids kept closed – a prop or similar should be provided to minimise the risk of finger trap when opening/closing the lid.
- A mesh over access hatches will reduce the risk of containers (eg filters) falling into tanks.
- A container to dispose of emptied oil cans should be provided next to the oil tank.
- All spills should be cleaned up promptly and a spill kit, including suitable absorbent granules, kept close to the tank.
- Employees should wear gloves when there is the potential to come into skin contact with oil – used engine oils can cause dermatitis and, in extreme cases, skin cancer.

### *Asbestos*

53 Detailed guidance on the reception, handling, storage and disposal of asbestos at HWRCs is given in *Safe handling of asbestos waste at civic amenity (CA) sites*.<sup>6</sup>

### **Paints and adhesives**

54 HWRCs receive a wide variety of paints and adhesives, usually as part-empty containers. These may be water- or solvent-based. Segregating hazardous and non/less-hazardous paints and adhesives will help to reduce specialist storage and disposal requirements but will require at least two segregated storage areas.

55 To reduce mixing of hazardous and non/less-hazardous waste, it is recommended that members of the public place all paint/adhesive containers onto a bunded tray for sorting by site staff.

- Separate skips/containers for paints and adhesives may be used at HWRC sites.
- Containers should be suitable for use and be capable of being locked and well ventilated.
- Containers should be labelled to indicate contents and have 'flammable' and 'no smoking or naked light' signs where necessary.
- If members of the public place paints direct into containers, they should be advised to place items carefully, not throw them, into the container.
- Solvent-based paint containers should not be within 6 metres of a flammable gas cage or battery container.
- Wear eye protection and gloves when handling paints and adhesives.

### **Thinners, solvents and other flammable liquids**

56 Small quantities of flammable liquids may be presented at HWRCs. Typically, these will be liquids such as white spirits and thinners in small bottles (large containers should be isolated if they are received on site). Household collection for larger quantities may be appropriate.

57 Flammable liquids should be left in the containers/bottles they are presented in unless these are leaking or in poor condition (in which case spill kits and containers should be used). HWRC workers should not attempt to bulk up flammable liquids by pouring them into larger containers/bottles. This can result in a high risk of fire if anti-static precautions are not in place – see HSE guidance *Safe use and handling of flammable liquids* (HSG140).<sup>7</sup>

58 Storage should consist of the following:

- a locked cabinet with internal isolation, bunding and ventilation;
- shelves within the cabinet should be ventilated to allow spills to fall through and not sit on a shelf;
- the cabinet located at least 6 metres from any battery container or other potential source of ignition;
- warning signs indicating 'flammable liquid' and 'no smoking and naked flames'.

59 Additional control measures should include:

- an eyewash bottle close to the cabinet;
- suitable fire extinguishers close to the cabinet;
- regular checks for spills – including checking for leaking containers within the cabinet (during hot weather more frequent checks may be required);
- use of absorbent granules to clean up any spillages immediately and the contaminated granules disposed of correctly;
- protective equipment, including eye protection, gloves, suitable clothing such as overalls – not synthetic because of fire injury risk;
- inventories managed to keep stored quantities to a minimum.

### **Garden chemicals (pesticides etc)**

60 Garden chemicals are normally non-reactive toxic substances, such as pesticides (herbicides, insecticides, fungicides etc) and oxidising agents such as fertilisers. These two groups should be stored separately.

61 Pesticides should be stored in a secure cupboard (as for flammable liquids). Reactive substances (eg sulphides) should be stored separately. Pesticide handling and storage should include:

- a separate locked cabinet with ventilation and internal bunding/spill containment;
- shelves within the cabinet should be ventilated to allow spills to fall through;
- the cabinet located at least 3 metres away from other waste containers;
- warning signs indicating a toxic hazard (hazard diamond);
- regular checks for spills – including checking for leaking containers within the cabinet;
- absorbent granules to clean up any spillages immediately and the contaminated granules disposed of correctly;
- protective clothing including eye protection, gloves, and suitable clothing such as overalls;
- segregation of solids (pellets) and liquids within the cabinet (solids at the top of the cabinet and liquids towards the bottom on separate shelves, to prevent liquids leaking onto solids);
- inventories managed to keep stored quantities to a minimum.

62 Fertilisers, either solid or liquid can be classed as oxidising agents. Storage of fertilisers should be to the same standards as pesticides, with the addition of:

- a container with a closed lid can be used – some oxidising agents will ‘heat’ when exposed to water and the container must be kept dry and not left open;
- the container should be labelled with the oxidising agent hazard diamond.

63 The National Household Hazardous Waste Forum has produced guidance that can help raise awareness of garden pesticide disposal ([www.nhhwf.org.uk](http://www.nhhwf.org.uk)).<sup>8</sup>

### **Household chemicals**

64 These can include a wide range of hazardous substances such as bleaches, hypochlorites, detergents and other cleaning products, usually as part-empty containers. In general, household chemicals can be split into low-risk substances, such as detergents, washing powders etc, and more hazardous substances such as bleaches and peroxides. The more hazardous substances should be kept in a dedicated secure cabinet with drip and spill protection and internal segregation to prevent substances mixing.

65 Operators should consider segregation and the compatibility of the different substances stored. For example, some household chemicals can react together to produce toxic gases and vapours.

66 Specialist contractors may be required to sort and remove the more hazardous household chemicals for disposal or recycling.

67 Lower hazard chemicals may be stored in a suitable container with a closing lid.

### **Fluorescent tubes, cathode ray tubes and similar**

68 These items present various hazards, including potential exposure to hazardous substances.

69 Fluorescent tubes can contain mercury, which if broken can be released as a vapour. Tubes should be handled carefully and placed in secure, robust containers with a closing lid or door.

- Tubes should be kept undamaged in suitable storage containers prior to specialist disposal/treatment.
- Eye protection, gloves and suitable clothing (strong overalls with long sleeves) should be worn when handling tubes.
- Do not store fluorescent tubes outside of containers.
- Any breakages must be cleared up immediately, using a spill kit.
- Respiratory protection may be required during clean up operations.

70 Cathode ray tubes contain phosphorous (applied to the inner surface of the tube's screen). As with fluorescent tubes, this is only a risk if the tube is broken.

- Do not break cathode ray tubes, take all care not to drop televisions and monitors which contain tubes.
- Store items with cathode ray tubes away from other wastes.
- Do not 'stack' televisions etc, as weight or unstable 'piles' may result in breakage.
- Any breakages must be cleared up immediately and all debris removed.

### Other substances

71 It is foreseeable that other wastes may be presented at HWRCs. Site operators should take account of this in their storage plans, particularly the reception, handling and quarantine of materials.

### References

- 1 *The storage of flammable liquids in containers* HSG51 (Second edition) HSE Books 1998 ISBN 978 0 7176 1471 4
- 2 Carriage of Dangerous Goods Manual: [www.hse.gov.uk/cdg/manual/index.htm](http://www.hse.gov.uk/cdg/manual/index.htm)
- 3 *The storage of flammable liquids in containers* HSG51 (Second edition) HSE Books 1998 ISBN 978 0 7176 1471 4
- 4 The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR): [www.hse.gov.uk/fireandexplosion/dsear.htm](http://www.hse.gov.uk/fireandexplosion/dsear.htm)
- 5 *Orphaned compressed gas cylinders in the waste and recycling industries*
- 6 *Safe handling of asbestos waste at civic amenity (CA) sites* HSE 2007 [www.hse.gov.uk/pubns/waste07.pdf](http://www.hse.gov.uk/pubns/waste07.pdf)
- 7 *Safe use and handling of flammable liquids* HSG140 HSE Books 1996 ISBN 978 0 7176 0967 3
- 8 The National Household Hazardous Waste Forum: [www.nhwhf.org.uk](http://www.nhwhf.org.uk)

### Further reading

*Chemical warehousing: The storage of packaged dangerous substances* HSG71 (Second edition) HSE Books 2009 ISBN 978 0 7176 6237 1

British Compressed Gasses Association (BCGA): *The safe handling of gas cylinders at waste facilities* ([www.bcga.co.uk/publications/L2.pdf](http://www.bcga.co.uk/publications/L2.pdf)) and technical information sheet TIS12 *Handle gas cylinders safely* ([www.bcga.co.uk/publications/TIS12.pdf](http://www.bcga.co.uk/publications/TIS12.pdf))

*Work with materials containing asbestos. Control of Asbestos Regulations 2006. Approved Code of Practice and guidance* L143 HSE Books 2006  
ISBN 978 0 7176 6206 7

British Aerosol Manufacturers' Association: *Guide to Safe Warehousing of Aerosols*  
[www.bama.co.uk/bama\\_guides](http://www.bama.co.uk/bama_guides)

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