

Loss prevention standards

# Control and Management of Combustible Waste Materials

Poor storage and management of waste materials can increase the risk of fire to a business. But with careful management and robust controls, this hazard can be reduced and often prevented.

# Control and Management of Combustible Waste Materials



## Introduction

Poor storage and management of waste materials may increase the risk of fire and the devastating impact that fire can have on a business. However, some of these fires might be prevented by introducing robust controls and effective management standards for storing and disposing of waste materials.

## Supporting Businesses with Fire Prevention

Every year, a significant number of fires in buildings or on sites involve combustible waste materials. Many fires involve hazardous waste materials such as used paper wipes, or rags/clothes impregnated with grease, mineral oils or cleaning solvents, particularly in trades such as motor, printing, engineering, construction and agriculture. Other general waste items can be anything which an organisation produces or must dispose of such as packaging materials or redundant machinery/equipment.



Common causes of these fires include arson/vandalism, storage too close to ignition sources and storage of incompatible materials. Organisations that generate a significant amount of combustible waste may need to put in place specialist storage containers and systems.

## Guidance from the Environment Agency

You can find best practice guidelines from The Environment Agency in its [technical guidance on classifying and assessing waste](#).

As part of an organisation's duty of care, it must classify the waste it produces:

- before it's collected, disposed of or recovered,
- to identify the controls that apply to the movement of the waste,
- to complete waste documents and records,
- to identify suitable authorised waste management options, and
- to prevent harm to people and the environment.

Storing waste materials should be kept to a minimum by reusing, recycling or recovering waste materials, according to the different waste types. Where necessary, arrange additional waste collections, particularly during peak periods, shutdowns and Bank Holidays, to avoid storing excessive amounts of materials over these periods.

It's illegal to mix a hazardous waste with either another hazardous waste material or with non-hazardous waste. Any organisation wishing to mix hazardous waste must apply for an environmental permit and show that mixing the wastes is the best available method.

## Effective Waste Management for Organisations

Waste disposal legislation in the UK is generally enforced by the appropriate Environment Agency (or similar) and Local Authorities. An organisation must register as a waste carrier, broker or dealer if they:

- transport waste,
- buy, sell or dispose of waste, or
- arrange for someone else to buy, sell or dispose of waste.

Businesses must make sure that their waste contractors are registered and authorised to collect and dispose of waste, including hazardous waste that requires specialist collection and disposal.

Transferring waste between two companies must be covered by appropriate documentation. For non-hazardous waste this usually means completing a waste transfer note or a document with similar information, such as an **invoice**. This ensures an audit trail from producing the waste until it's safely disposed of. Waste transfer notes must be kept for at least two years.

When hazardous waste such as batteries, solvents, pesticides and oils are moved, they must normally be accompanied by a consignment note, which needs to be completed before moving the materials.

As part of the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR), a risk assessment must be carried out where any work activities involve using a dangerous substance, such as solvents, petrol and flammable gases including liquid petroleum gas (LPG).

## Setting-up Operational Controls

Suitable storage locations should be identified for all hazardous waste materials, with appropriate warning signs clearly displayed. It's important to make sure that:

- people who handle these materials are suitably trained,
- adequate natural or mechanical ventilation systems are provided if required,
- any electrical equipment in the immediate area is suitable for the environment,
- hazardous storage is kept to a minimum, and
- appropriate containment is in place, if needed.

### Storage Areas

External waste storage areas must be at least 10 metres from buildings and at least 2 metres from boundary fences. **Where this isn't possible, due to the size of the yard**, either a secure, fire-resistant enclosed room (minimum 2 hours, preferably detached) maybe considered. Or, where storage is within 2 metres of a boundary fence, the fence should be securely clad in steel sheet to cover any openings and designed to prevent ignition sources being pushed through the fence. This should extend 3 metres either side of the storage area and be of suitable height to deter intruders.

Waste storage areas should be located on hard concrete standings and enclosed where possible by walls or security fencing at least 3 metres high, with secure padlocked gates. The area should be covered by monitored CCTV camera surveillance.

### Containers

Used or damaged aerosols should be stored in fire-resistant steel containers with self-closing metal lids and removed to a dedicated external storage facility as soon as possible, or at least by the end of each shift or the close of the working day. The containers should not be over-filled, as this can result in canisters discharging their contents. Aerosols must not be stored in containers with other general waste.

Waste oils and flammable liquids need to be stored separately in proprietary non-combustible and secure containers/tanks, with suitable spillage containment provided, sized to take 110% of the largest container/tank contents. They should not be stored with oxidising agents, corrosive chemicals, materials susceptible to spontaneous heating and/or explosions and substances that react with air or moisture to create heat.

### LPG Cylinders

Empty and full LPG cylinders should be segregated from each other and clearly identified. Empty cylinders may still contain a quantity of LPG and remain a hazard. Transportable cylinders must be chained in the upright position preferably on proprietary trolleys or stands, to prevent them from toppling. Bulk storage of empty LPG cylinders must be located externally in a well-ventilated, secure caged compound, separate from other gas cylinders and protected from direct sunlight.

LPG should never be stored in basement areas or below ground level. Empty cylinders should be regularly returned to the suppliers, to ensure the quantity of cylinders remains as low as possible.

### Acetylene Cylinders

The inherent hazards associated with acetylene gas cylinders means that they should not be stored on site, and only used when no other suitable welding or cutting alternative is available. In a fire situation involving acetylene cylinders, current operating protocol from the Fire Service is to introduce a 200m-wide exclusion zone that could last for up to 48 hours, preventing access to the site whilst the cylinders are cooled.

If the use of acetylene is required, make sure that empty and full cylinders are segregated from each other and clearly identified as such. When moving acetylene cylinders, make sure they are securely chained upright on an appropriately designed trolley. Do not drag, slide or drop the cylinders. Empty acetylene cylinders should be stored externally in a well-ventilated, secure compound, separate from other gas cylinders and protected from direct sunlight. They should be regularly returned to suppliers, to ensure the quantity of cylinders remains as low as possible.

## Housekeeping Essentials to help Reduce the Risks

- Workplace areas need particular attention to regularly remove process waste from motors, engines, exhausts, dust collection bags, machinery, floors and workbenches. Keep used and soiled paper wipes, rags or clothes in metal-lidded containers reserved for hazardous materials.
- **Waste shouldn't be stored in areas that have a potential ignition source, such as heaters, electrical distribution boards, battery charging equipment, engines, machinery/plant, or hot surfaces, or in places that may obstruct fire escape doors, exit routes, fire points or hydrants.**
- Waste should be stored in metal non-combustible containers, such as a skip, compactor or baler, with self-closing lockable metal lids. These containers should be regularly inspected and monitored to make sure they are not overflowing, that the area is kept tidy and that waste collection arrangements are adequate. Each waste container should be clearly identified to make sure everyone is aware of the contents and potential hazards.
- **At the end of the shift or day's work, all waste materials should be removed from the buildings to the external bulk storage area.**
- Storage areas reserved solely for hazardous waste materials should be kept well clear of other storage locations, with appropriate segregation for the different types of waste. The area should be located away from surface water drainage and potential sources of ignition (including vehicle engines/exhausts and smoking shelters), trees, vegetation, etc.
- Waste burning should not be carried out on site and should be prohibited.
- **'No Smoking' signage should be clearly displayed in areas where combustible waste is stored.**
- Mobile containers that are not in a secure fenced and gated compound should be locked into position to prevent unauthorised movement. A trained member of staff should be designated as the waste manager responsible for overall control and management of the site waste.
- Routine housekeeping assessments should include monitoring waste control procedures – see Aviva Loss Prevention Standards 'Fire Safety Inspections' and 'Housekeeping – Fire Prevention'.

## Checklist

A generic Control and Management of Combustible Waste Materials Checklist in Appendix 1 which can be tailored to your own organisation.

## Specialist Partner Solutions

Aviva Risk Management Solutions can offer access to a wide range of risk management products and services via our network of Specialist Partners who are reputable companies offering agreed discounted rates for Aviva customers.

For more information please visit:

[Aviva Risk Management Solutions – Specialist Partners](#)

## Sources and Useful Links

- Fire Protection Association/RISCAuthority: ‘RC8 – Recommendations for the storage, use and handling of common industrial gases in cylinders’
- Fire Protection Association/RISCAuthority: ‘RC49 – Recommendations for the storage, handling and use of acetylene cylinders’
- Fire Protection Association/RISCAuthority: ‘RC55 – Recommendations for fire safety in the storage, handling and use of flammable and highly flammable liquids’
- [RISCAuthority](#)
- [The Fire Protection Association \(FPA\)](#)

## Additional Information

Relevant Loss Prevention Standards include:

- Arson Prevention
- Fire Safety Inspections
- Housekeeping – Fire Prevention
- Smoking and the Workplace
- External and Internal Third Party Exposures – Property Protection

To find out more, please visit [Aviva Risk Management Solutions](#) or speak to one of our advisors.

Email us at [riskadvice@aviva.com](mailto:riskadvice@aviva.com) or call 0345 366 6666.\*

\*Calls may be recorded and/or monitored for our joint protection.

# Appendix 1 - Control and Management of Combustible Waste Materials Checklist



Location	
Date	
Completed by (name and signature)	

	Control and Management of Combustible Waste Materials	Y/N	Comments
1.	Has a waste risk assessment been completed which identifies the different types of waste produced, including the quantities?		
2.	Has the type of waste been classified (in accordance with WM3)?		
3.	Is there any hazardous waste and have staff been trained on the risks and how to handle and store the waste correctly?		
4.	Has the business appointed an overall waste manager responsible for completing a waste plan, controlling and managing the waste on site?		
5.	Has the business completed a waste plan with the licensed waste contractor, and is the location where the waste contractor will finally dispose of your waste known and recorded?		
6.	Are waste transfer notes/consignment notes completed for each type of waste with copies held on site for at least 2 years?		
7.	Is your waste contractor registered to dispose of your waste, including any hazardous materials?		
8.	If hazardous waste is present has a DSEAR assessment been completed and any recommendations implemented?		

	Control and Management of Combustible Waste Materials Contd.	Y/N	Comments
9.	Has spillage containment and clean-up plans been prepared, and have the plans been tested?		
10.	Has a suitable area of the site been designated for the storage of all combustible waste materials?		
11.	Is the waste in containers and skips clearly identified and is it segregated from other stored goods?		
12.	Are the correct hazard warning and 'No Smoking' signs installed?		
13.	Is non-hazardous waste kept separate from hazardous waste (this includes segregating hazardous waste from other types of hazardous waste)?		
14.	Is waste kept in metal non-combustible containers fitted with self-closing metal lids that are secured and locked when not in use?		
15.	Are precautions in place and additional collections arranged to prevent waste bins and containers being over-filled and over-spilling?		
16.	Are additional collections arranged and precautions in place to ensure all waste bins and containers are left empty prior to shut down or holiday periods?		
17.	Are waste bins and containers stored clear of fire escape doors/exit routes and fire points/hydrants?		
18.	Is the waste stored in areas free from potential ignition sources such as: heaters, electrical distribution boards, battery charging units, engines, exhausts/ducts, machinery or plant or where hot surfaces may exist?		
19.	Is all waste removed from the building at the end of each shift or at the end of the day's work to a designated external remote storage area?		

	Control and Management of Combustible Waste Materials Contd.	Y/N	Comments
20.	If applicable, is the waste store room constructed of at least 2-hour fire resistance fitted with 2-hour self-closing fire doors that are secured and locked when not in use, having spillage containment?		
21.	Is automatic fire detection installed to storage areas/rooms?		
22.	Does the waste room have automatic fire suppression/sprinklers installed?		
23.	Does the hazardous storage area have additional high and low-level ventilation direct to the outside, and are immediate external areas clear of potential ignition sources?		
24.	Are all storage areas located on a hard concrete standing clear of any surface water gullies and drains?		
25.	Are LPG/gas cylinders secured by chains in the upright position, segregated to keep full and empty cylinders away from each other, and are they suitably identified as such?		
26.	Are differing types of gas stored separately and spatially separated by at least 3 metres between cages?		
27.	Are LPG/gas cylinder numbers kept to a minimum with empty cylinders regularly collected?		
28.	Is the storage of acetylene prohibited?		
29.	Are external bulk waste material storage areas more than 10 metres from buildings and are they clear of trees, vegetation, and potential ignition sources?		
30.	Are bulk waste material storage areas secured and protected from unauthorised entry, particularly when the site is not operational?		
31.	Are mobile waste containers locked into position when the site is closed to prevent unauthorised movement?		
32.	Additional comments:		





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## LOSS PREVENTION STANDARDS