Keep Your Business In Business

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www.wmarsontaskforce.gov.uk/kybib

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Legal

The information contained in this Handbook is for general guidance on matters of fire safety only. The application and impact of laws can vary widely based on the specific facts involved and you are advised to seek further specialist advice if you are at all uncertain as to their application in relation to your business. Given the changing nature of laws, rules and regulations, and the inherent hazards of electronic communication, there may be delays, omissions or inaccuracies in the information contained in this Handbook.

While we have made every attempt to ensure that the information contained in this Handbook has been obtained from reliable sources, The West Midlands Arson Task Force is not responsible for any errors or omissions, or for the results obtained from the use of this information. All information in this Handbook is provided "as is", with no guarantee of completeness, accuracy, timeliness or of the results which will be obtained from the use of this information.

Under no circumstances will The West Midlands Arson Task Force, its related partnerships or partners, agents or employees thereof be liable to you or anyone else for any decision made or action taken in reliance on the information in this Handbook or for any consequential, special or similar damages, even if advised of the possibility of such damages.

Information contained in this document is correct at time of going to publication.

Initial Fire Risk Assessment Questionnaires

This guidance is designed to help you in completing the enclosed initial fire risk assessment form to aid you in meeting your responsibilities under the Regulatory Reform (Fire Safety) Order 2005 (FSO).

It is not designed to be a definitive guide. To assist you there are a number of guides available - see '**Useful Contacts**' section for suppliers and guides.

The "Fire Risk Assessment Questionnaire" will, by using a series of questions and directions, point you towards the areas that you should address and the type of information that should be recorded. Assistance may be requested from and given by a Fire Authority Inspecting Officer or Business Liaison Officer, but it is not the duty of the Fire Authority to complete the risk assessment for you.

You may, if you so wish, appoint a competent person to assist in completing the form.

A person would be regarded as competent where he or she has sufficient training and experience or knowledge and other qualities to enable him or her properly to assist in undertaking the measures needed to comply with the requirements of the order.

Following the completion of the Fire Risk Assessment, you should record any significant findings and the fire precautions measures that have been provided within the premises.

Significant Finding

The important thing you need to decide is whether the hazard from fire you have identified is important enough to be a source of serious potential harm or in any given situation may cause loss, death, injury or damage.

Consider how likely it is that each hazard could cause harm. This will determine whether or not you need to do more to reduce the risk. Even after all precautions have been taken, some risk usually remains. What you have to decide for each significant hazard is whether this remaining risk requires 'Control Measures'.

Control Measure

These are actions taken to eliminate or minimise adverse risks. They may exist in the form of policies, standards, procedures, equipment, training or physical changes.

Risk Assessment

The process of identifying hazards and determining the risks they pose, to decide what control measures are appropriate.

Compliance

These are the preventative and protective fire safety measures that have been taken to show how you have complied with the legislation following your risk assessment.

Arson

Section 1(3) Criminal Damage Act 1971
An offence committed under this section by destroying or damaging property by fire shall be charged with arson. This offence carries a maximum sentence of life imprisonment.

You will see that at the end of the questionnaire there is a series of questions aimed at restricting and preventing arson attacks upon your premises. The advice is good-will and common-sense. The points are also intended for consideration when the premises are not occupied by your workforce. **The business remains at risk from an arson attack when the employees have gone home.**

False Records

Article 32(2) FSO makes it an offence to make false entries in any register, book, notice or other document required to be kept under the FSO.
Give false information which is subject to this order.
Intentionally obstruct an inspector who is exercising powers or duties under the FSO.
Article 32(3) states any person found guilty of the above offences may face a fine or a term of imprisonment not exceeding two years.

Fire Safety Management Policy

It is important to ensure that your company has clear management policy, procedures and guidance with reference to fire safety and everyone in the organisation should know what their responsibilities are along with everyone else's.

1.1 What is your company policy on fire safety?

Considerations:

- What is it?
- Where can it be found?
- What does and what should it cover?
- Who is responsible for it i.e. health & safety manager?
- Clear
- Easily communicable
- Difference between fire and bomb threat
- Who is responsible at Board level?

1.2 Who is responsible and has been nominated for implementing fire safety?

Considerations:

- Look at the roles and responsibilities of your employees
- Fire marshals
- Fire wardens
- Nominate sufficient competent people
- Ensure all competent people co-operate and co-ordinate their actions
- Ensure everyone knows their responsibilities and what other people's responsibilities are
- Provision of information to employees and other people i.e. non-employees
- Make sufficient time and resources available to enable them to fulfill their functions
- Carry out regular tests / drills / audits to check effectiveness

1.3 What is your training policy?

Considerations:

- Induction training when staff are first employed
- New risks
- Transfer from one job to another
- Introduction of new technology
- New systems of work
- Emergency procedures
- Safe practice
- Firefighting equipment

- Safe handling of dangerous substances
- Training by competent person
- Records
- Evacuation procedures
- Members of the public who resort
- Early morning cleaners, security staff, etc.
- Include precautions and actions to take to protect oneself
- Repeat training
- Training conducted during working hours

1.4 What fire safety information is available and how do you provide it to people who reside on your premises?

Considerations:

- Risks from the risk assessment
- Preventative and protective measures
- Emergency procedures
- Nominate people to secure evacuation
- Assembly points
- Inform responsible person
- Young persons / parents / disabled
- Dangerous substances
- Procedure for serious and imminent danger
- Identify competent person

1.5 When and where are practice drills carried out?

Considerations:

- Who is responsible for these drills
- How often are they conducted
- Who do they involve – employees, emergency services
- Fire drill should be carried out at least once in every period of 12 months (six months for hotels and boarding houses), or more frequently if you have a significant turnover of staff.

1.6 What are your considerations in relation to fire safety in respect of young people?

Considerations:

- Their inexperience, lack of awareness of risks and immaturity the fitting-out and layout of the premises
- The nature, degree and duration of exposure to physical and chemical agents

- The form, range, and use of work equipment and the way in which it is handled
- The organisation of processes and activities
- The extent of the safety training provided or to be provided to young persons
- Risks from agents, processes and work listed in the Annex to Council Directive 94/33/EC[46] on the protection of young people at work

1.7 Where preventive and protective measures have been implemented what principles have they been based on?

Considerations:

The principles to consider are:

- Avoid risks
- Evaluate the risks which cannot be avoided
- Combat the risks at source
- Adapt to technical progress
- Replace the dangerous by the non-dangerous or less dangerous
- Develop a coherent overall prevention policy which covers technology, organisation of work and the influence of factors relating to the working environment
- Give collective protective measures priority over individual protective measures and giving appropriate instructions to employees

1.8 What are your fire safety arrangements and are they appropriate for the premises?

Considerations:

When planning, organising, monitoring and reviewing the fire safety arrangements for your premises, i.e. means of escape, fire alarm, firefighting equipment, etc it is necessary to look at:

- the size of your premises
- the nature of its activities

and have you recorded them.

1.9 What arrangements are in place to ensure the co-operation and co-ordination of your fire safety arrangements and other people's fire safety arrangements?

Considerations:

You need to ensure that everyone is aware of your fire safety arrangements and you are aware of theirs and the impact of their arrangements on you and the people who resort at your premises.

1.10 What arrangements are in place to ensure that all employees are aware of their responsibilities in relation to the fire safety arrangements?

Considerations:

Ensure that all employees are aware that they have:

- a responsibility to take reasonable care for the safety of themselves and any other persons who may be affected by their actions at work
- to co-operate with their employer in meeting the fire safety arrangements
- to inform their employer or any other employee of any work situation that poses a serious and immediate danger to safety or shortcoming in the employer's safety arrangements

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk/kybib

Sources of Fuel

Walk around your workplace and make a note of any flammable substances or combustible materials that could provide fuel for fire, or contribute to the spread of fire within the workplace.

Anything that burns is fuel for a fire. So you need to look for things that will burn reasonably easily and are in sufficient quantities to provide fuel for a fire or cause it to spread to another fuel source. Some of the most common 'fuels' found in workplaces are: -

- Flammable liquids, such as paints, thinners, adhesives, petrol, etc.
- Flammable chemicals
- Paper, wood, foam (used in furniture) or plastics?
- Flammable gases, e.g. Liquified Petroleum Gas (LPG)
- Textiles

2.1 What highly flammable substances are there in the workplace and what Control Measures are in place, e.g. paints, thinners, flammable gases etc., flammable chemicals, plastics, rubbers, foam (polystyrene, polyethylene)?

Considerations:

- Ensuring all flammable materials/liquids are handled/stored correctly.
- Ensuring adequate separation distances between flammable materials.
- Replace substances with safer alternatives
- Remove or significantly reduce any highly flammable substances
- Keep substances in fire resisting stores
- Separate substances from heat sources by use of fire resisting construction
- Keep minimum quantity in work area
- Ensure all containers are kept closed when not in use
- Improve ventilation

2.2 How is your combustible material stored, on display or used in the workplace e.g. paper, cardboard packaging, fabrics, wood etc? What Control Measures are in place?

Considerations:

- Replace stocks of combustible materials with non-combustibles
- Reduce stocks of readily combustible materials to a minimum
- Separate materials from heat sources by fire resisting construction

2.3 What Control Measures are in place to deal with combustible waste e.g. wood shavings, offcuts, dust, paper?

This question requires you to look into the amount of combustible waste allowed to accumulate in the workplace, which could contribute to the risk of fire.

Considerations:

- Improve arrangements for the disposal of waste and rubbish
- Improve general housekeeping
- Ensure that staff are aware of the standard of housekeeping required
- Give specific additional training to the staff responsible

2.4 What Control Measures are in place to deal with foam-filled furniture?

This question is asked due to the known fire hazard of polyurethane foam-filled furniture. You should be able to find out about your furniture by physically checking it for labels, signifying that it is match resistant etc. or by contacting the suppliers to check on the specifications.

Considerations:

- Repair or replace
- Replace with combustion modified foam.

2.5 What Control Measures are in place to prevent walls and ceilings being covered with combustible linings e.g. walls covered with carpet tiles, ceilings covered with polystyrene tiles, notice boards that have large amounts of loose paper on display?

This question asks you to consider the construction of your workplace and how this might contribute to the spread of fire. Does the internal construction include large areas of hardboard, chipboard, blockboard walls or ceilings or synthetic ceiling or wall coverings such as polystyrene tiles?

If these are present and you are uncertain of the danger they might pose, you should seek advice from your local fire authority or other experts on what precautions you need to take to reduce the risk to people in the event of fire.

Considerations:

- Remove
- Reduce
- Treat with fire resisting solution
- Cover
- Replace with more suitable material

2.6 What Control Measures are in place to ensure that combustible artificial foliage or plants are not used to decorate the workplace?

Considerations:

- Introduce real plants
- Replace with non-combustible plants
- Remove
- Treat with fire resisting solution

2.7 What Control Measures are in place for additional sources of oxygen stored or used e.g. oxidising chemicals, oxygen cylinders or piped systems?

This question directs you to the possible hazard from oxygen and you can reduce the potential source of oxygen supply to a fire.

This is a straightforward process of hazard spotting within the workplace.

Considerations:

- Move oxidising material away from any heat or flammable materials
- Control use and storage of oxygen and chemicals
- Remove sources of ignition
- Close all doors, windows and other openings not required for ventilation particularly out of working hours.

2.8 What Control Measures are in place for aerosol cans filled or stored in the premises?

Considerations:

- Replace aerosol cans with less hazardous ones (change propellant)
- Reduce numbers
- Store large quantities in purpose-built store

N.B. Significant Findings.

Once you have completed this section, you will need to record any of the significant hazards and the 'Control Measures' provided to reduce the risk. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk/kybib

Sources of Ignition

This section requires you to identify the potential ignition sources in your workplace by looking for possible sources of heat, which could get hot enough to ignite the material in the workplace. These sources of heat could include: -

- Smokers' materials
- Faulty/misused electrical equipment
- Hot surfaces
- Naked flames
- Cooking
- Arson

Indications of 'near misses', such as scorch marks on furniture or fittings, discoloured or charred electrical plugs and sockets, cigarette burns etc., can help you identify hazards which you may not otherwise notice.

3.1 What Control Measures are in place for 'hot work' processes such as welding, flame-cutting, hot surfaces or sparks?

You may not have 'hot work' processes in your workplace as a general rule, welding, flame-cutting, use of blowlamps etc., but they may be introduced on a temporary basis by a contractor or an employee.

You must ensure that anyone who uses naked flame or heat producing equipment is trained as to the hazards that are created, and the safety precautions that need to be taken. The proven method for controlling 'hot work' processes (especially temporary ones) is by use of a permit to work system. This is a formalised system, which will ensure that employees and contractors work safely. The permit should ensure actions, similar to the ones listed below, are taken: -

- Remove combustible materials from the immediate work area.
- Cover/sheet up any combustibles that cannot be removed, with a fire retardant cover.
- Have a suitable fire extinguisher to hand and know how to use it.
- Know where the nearest fire alarm call point is.
- Know what action to take in the event of a fire.
- Consider what effect the 'hot work' will have on any automatic system such as smoke detectors. If necessary, detectors may need to be isolated whilst this work is done. You may then have to consider if any additional safety measures need to be taken, and the system must be re-instated as soon as possible once the work is completed.

- Checking the work area for any smouldering fires, after completion of the work, and before the site is left.

Considerations:

- Replace with a cold system
- Implement a hot work permit system
- Minimise the amount of combustible materials in the work area
- Arrange so that hot metals and sparks are safely contained
- Eliminate surfaces/sparks

3.2 What Control Measures are in place for processes such as incinerating or cooking?

Where any purpose-built incinerating or cooking equipment is in place, it must be used and serviced in accordance with the manufacturer's instructions. Records must be kept of any servicing and maintenance completed and any required safety notices must be provided.

Considerations:

- Ensure that cookers, incinerators etc. are used in accordance with manufacturer's instructions
- Ensure they are cleaned regularly, including ducts or flues / hoods
- Implement a regular testing and maintenance programme

3.3 What Control Measures are in place for any heaters e.g. radiant or open flame portable heaters?

You are required to identify the number and type of heaters provided and if any of them can be replaced with a more suitable design. When considering the suitability, you must consider the design and the location where it will be used.

Considerations:

- Replace equipment with fixed or convector heaters
- Ensure that gas or oil burning equipment is used in accordance with manufacturer's instructions
- Ensure that all heaters are adequately guarded
- Ensure all portable heaters are stable

3.4 What is your Smoking Policy?

Considerations:

- Implement a policy, which provides for safe smoking areas and prohibit elsewhere
- Enforce the prohibition of matches and lighters in high-risk areas

3.5 What Control Measures are in place to prevent light fittings being near combustible materials?

Considerations:

- Remove combustible materials
- Replace tungsten bulbs with fluorescent tubes in areas where there is a possibility that combustible materials may be ignited

3.6 What Control Measures are in place to ensure that electrical equipment and wiring is being used in accordance with the manufacturer's recommendations and, that faulty or damaged electrical equipment and wiring is not being used?

Considerations:

- Repair or replace faulty electrical or damaged equipment
- Earth all equipment to remove static electricity
- Ensure that all electrical equipment is serviced regularly
- Ensure all fuses are the correct amperage/circuit breakers
- Provide protective devices: RCDs and thermostats

3.7 What Control Measures are in place for the use of 'wander lamps' or extension leads?

Considerations:

- Ensure all extension leads are fully uncoiled
- Ensure that 'wander lamps' have adequate guards
- Ensure flexible power cables are kept as short as possible and safely routed

3.8 What is your Arson Policy?

This question asks you to consider the potential problem of arson.

This is a very important aspect and should not be underestimated as it is one of the major causes of fire.

At the present time there is no legal requirement upon you to consider the risk of an arson attack on your business. However having gone to the effort of fire risk assessing your premises during working hours, it would seem remiss not to consider the fire risk outside of working hours. The loss of all or part of the premises may mean the difference between your business's survival or failure.

Considerations:

Ensure:

- Outside storage is at least 20 metres from the building
- Items stored outside cannot afford access to windows or doors
- That all combustible material is reduced to a minimum or removed
- That any outside storage is secured against unauthorised access i.e. dustbins locked in compound or chained to an immovable object

- Empty or full flammable containers are removed, reduced or stored in a secure compound or store
- That the external perimeter of the premises is well maintained
- That any easy access routes via drainpipes, flat roofs etc. have been eliminated.

N.B. Significant Findings.

Once you have completed this section, you will need to record any of the significant hazards and the 'Control Measures' provided to reduce the risk. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk/kybib

Identifying People At Risk

If there is a fire, the main priority is to ensure that everyone reaches a place of safety quickly. Putting the fire out is secondary to this, because the greatest danger from fire in a workplace is the spread of fire, heat and smoke through it. If a workplace does not have adequate means of detecting and giving warning or means of escape, a fire can trap people or they may be overcome by the heat and smoke before they can evacuate.

As part of your assessment, you need to identify who may be at risk if there is a fire, how they will be warned and how they will escape. To do this, you need to identify where you have people working, whether at permanent workstations or occasional ones, and to consider who else might be at risk, such as customers, visiting contractors etc., and where these people are likely to be found.

4.1 What Control Measures are in place for staff at increased risk from fire e.g. works in remote areas, lone working, sleeping etc.?

This question asks you to consider:

- Are any staff at increased risk from fire?
- Do staff work in remote areas?
- Do you have staff working on their own?
- Are staff put at increased risk from sleeping facilities that are provided for staff or guests?

Considerations:

- Can they be relocated
- Improve the means for warning them about fire e.g. detection
- Improve the means of escape

4.2 What Control Measures are in place for people who may be unable to react quickly to a fire, due to safety critical work processes?

This question asks you to consider the type and number of people who may be present in your workplace, how they may affected by fire, and their ability to escape from a fire.

Considerations:

- Introduce appropriate close down procedure
- Improve means of warning/means of escape

4.3 What Control Measures are in place for people present, whose disabilities would put them at a disadvantage, when required to evacuate in an emergency?

Disabilities may be permanent or temporary, and they may be obvious or less obvious. You will need to assess each individual case on its own merits if the person with the disability is based in the workplace, i.e. an employee. If, however, your workplace is open to the public, then you must plan for the possibility of disabled persons being present, and in either case your emergency plan should cater for this eventuality.

When considering means of escape, disabilities can be in many forms, e.g.:-

- Wheelchair users
- People on crutches/walking sticks/walking aids
- Blind or vision impaired
- Deaf or hearing impaired
- Colour blind so cannot read safety signs
- Learning difficulties or mental illness

Of course, anyone who is slower to react or evacuate than everyone else may need assistance, e.g.:-

- Children
- Heavily pregnant ladies
- Older people
- People under the influence of drugs or alcohol
- People who are asleep
- People who are ill

Considerations:

- Incorporate measures in your emergency plan
- Provide additional specialist equipment
- If any staff are required to assist in an evacuation, are there sufficient numbers and are they trained?
- Provide safe refuges
- Consider relocation

4.4 What Control Measures are in place for visitors or members of the public likely to be unfamiliar with the escape routes?

Considerations:

- Ensure staff are adequately trained to assist with evacuation
- Improve signage
- Use voice alarm system for evacuation

4.5 What Control Measures are in place for builders, contractors or maintenance workers temporarily on site?

Considerations:

- Ensure that they are aware of fire safety arrangements and emergency plans

N.B. Significant Findings.

Once you have completed this section, you will need to record any of the significant hazards and the 'Control Measures' provided to reduce the risk. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk/kybib

Dangerous Substances

The Regulatory Reform (Fire Safety) Order 2005 (FSO) like The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) it will require the responsible person to carry out a risk assessment to identify those dangerous substances present and how fire, explosion and similar events might harm employees and any other people affected by the work concerned.

Before you carryout your risk assessment you will need to decide whether the legislation applies to your premises and you have dangerous substances on your premises.

5.1 Does FSO apply to your premises?

FSO does not apply to:

- A domestic premises
- An offshore installation
- A ship
- Fields, woods or other land forming part of an agricultural or forestry undertaking
- An aircraft, locomotive or rolling stock, trailer or semi-trailer used as a means of transport or a vehicle
- A mine
- A borehole site

5.2 Does DSEAR apply to your premises?

Other than for certain maritime activities, DSEAR applies whenever:

- there is work being carried out by an employer (or self employed person);
- a dangerous substance is present (or is liable to be present) at the workplace;
- the dangerous substance could be a risk to the safety of people as a result of fires, explosions or similar energetic events (as apposed to a risk to health).

Full details are available from **www.hse.gov.uk/fireandexplosion/dsear/background**

Industries affected

The following examples illustrate the type of activities and substances commonly found at work that are likely to be covered are:

- Storage of petrol as a fuel for cars, motorboats, horticultural machinery, etc.
- Use of flammable gases, such as acetylene, for welding, handling and storage of waste, dusts in a range of manufacturing industries
- Handling and storage of flammable wastes including fuel oils
- 'Hot work' on tanks or drums that have contained flammable material
- Work activities that could release naturally occurring methane

- Dusts of many combustible materials such as coal, wood, grain, sugar, certain metals and synthetic organic chemicals, when dispersed in air to form a cloud that can explode if an ignition source is present
- Use of flammable solvents in pathology and school laboratories
- Storage/display of flammable goods, such as paints, in the retail sector
- Filling, storage and handling of aerosols with flammable propellants, such as Liquified petroleum gas (LPG)
- Transport of flammable liquids in containers around the workplace
- Deliveries from road tankers, such as petrol or bulk powders
- Chemical manufacture, processing and warehousing
- Petro-chemical industry – onshore and offshore

Does the legislation apply to your premises?
If the answer is **yes** proceed to the next stage.

Dangerous Substances

The next stage is to determine whether dangerous substances are present and the following questions will assist you in that determination.

5.3 What substance or preparation is present that is explosive, oxidising, extremely flammable, highly flammable or flammable (whether or not it is classified under the CHIP Regulations)?

CHIP means The Chemicals (Hazard Information and Packaging for Supply) Regulations 2003 (S.I. 2002/1689). Examples of these substances include:

- Petrol
- Liquified petroleum gas (LPG)
- Paints
- Varnishes
- Combustible and explosive dusts produced in, for example, machining and sanding operations

5.4 What substance or preparation create a risk because of its physico-chemical or chemical properties and the way it is used or is present in or on a premises?

A substance or preparation may be dangerous because of the way it is used or present. For example, diesel oil is not classified as flammable under CHIP however; its physical properties are such that when heated to a high temperature or pressurised it can present a fire risk.

Another example would be substances which on their own or when mixed with others decompose or react to release energy such that there could be a fire or

explosion. Examples include certain chemical reactions with the potential for thermal runaway and the handling and storage of unstable substances such as certain types of peroxides.

5.5 What dust, whether in the form of solid or fibrous materials or otherwise, which can form an explosive mixture with air or an explosive atmosphere is present?

Examples of dusts:

- Wood, flour and many other dusts are, depending on the circumstances of the work, also dangerous substances. This is because when the dust is mixed in a cloud with air it can, in certain circumstances, be ignited and explode
- Work activities involving grinding or machining are particularly prone to this risk.

5.6 What additional matters have been considered in relation to dangerous substances?

Considerations:

This should include:

- The hazardous properties of the substance
- Any information on safety provided by the supplier i.e. safety data sheet
- The circumstances of the work including:
- The special, technical and organisational measures and the substances used and their possible interactions
- The amount of the substance involved
- Where the work will involve more than one dangerous substance, the risk presented by such substances in combination
- The arrangements for the safe handling, storage and transport of dangerous substances and of waste containing dangerous substances
- Activities, such as maintenance, where there is the potential for a high level of risk
- The likelihood that ignition sources, including electrostatic discharges

Identifying People at Risk

Once you have identified your that a dangerous substance is present you need to consider their impact on the people that will resort at your premises.

5.7 What people are at risk from these dangerous substances?

Considerations:

You need to consider not only employees at the workplace, but also any other person whether at work or not who may be put at risk by dangerous substances i.e. employees working for other employers, visitors.

You need to look at the provision of Personal Protective Equipment [PPE], appropriate working clothes, information, instruction and training, subject to the nature and degree of risk and information for dealing with accidents

Note:

DSEAR does not address any health risks these are dealt with by the Control of Substances Hazardous to Health Regulations (COSHH), which have been amended to implement the health side of Chemical Agents Directive (CAD).

Safety Measures

When looking at the risks from dangerous substances you need to look at the use in your premises from handling, storage, transport, and waste etc. You are required to ensure that the safety risks from dangerous substances are either eliminated or reduced too as far, as is reasonably practicable. Where it is not reasonably practicable to eliminate risks, you are required to take measures to control risks and measures to mitigate the detrimental effects of a fire or explosion or similar event, so far as is reasonably practicable. Also before using a new dangerous substance a risk assessment should be carried out.

5.8 What substances can be eliminated?

Considerations:

- Replace a dangerous substance with a substance or process that totally eliminates the risk
- Replace the dangerous substance with one that is less hazardous
- Design the process so that it is less dangerous
- Ensure measures are maintained

Note:

When doing any thing like this you must ensure that no other new safety or health risks are created or increased.

5.9 What control measures can be implemented to reduce the risk from these substances?

Considerations:

- Reduce the quantity of dangerous substances to a minimum

- Avoid or minimise releases
- Control releases at source
- Prevent the formation of an explosive atmosphere
- Collect, contain and remove any releases to a safe place (e.g. by ventilation)
- Avoid ignition sources
- Avoid adverse conditions (e.g. exceeding the limits of temperature or control settings) that could lead to danger
- Keep incompatible substances apart
- Ensure measures are maintained

5.10 What mitigation measures can be implemented to reduce the risk from these substances?

Considerations:

- Reduce the numbers of employees exposed
- Provide plant which is explosion resistant
- Provide explosion suppression or explosion relief equipment
- Take measures to control or minimise the spread of fires or explosions
- Provide suitable Personal Protective Equipment (PPE)
- Design, construct and maintain the workplace to reduce the risk (e.g. fire-resistance, explosion relief)
- Design, assemble, construct, install, provide, use and maintain suitable work processes, including all relevant plant, equipment, control and protection systems
- Provide equipment and protective systems that:
  - in the event of a power failure equipment and protective systems are able to be maintained in a safe state of operation independently of the rest of the plant
  - have manual overrides for shutting down automatic equipment and protective systems are available without compromising the safety of anyone
  - on the operation of an emergency shut down the accumulated energy can be dissipated as quickly as possible or isolated so it no longer constitutes a hazard
  - there is no confusion between connecting devices
- Provide appropriate systems of work including written instructions, permits to work and other procedural systems of organising work
- The hazardous contents of containers and pipes are identified
- Ensure measures are maintained

5.11 Where are the hazardous zones (explosive atmospheres)?

Considerations:

- Classify zone on their likelihood and persistence
- Protect zones from sources of ignition by selecting equipment and protective systems meeting the requirements of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 1996
- Where necessary, areas classified into zones mark with a specified "EX" sign at their points of entry
- Where employees work in zones ensure they are provided with appropriate clothing that does not create a risk of an electrostatic discharge igniting the explosive atmosphere
- When coming into operation for the first time, areas where explosive atmospheres may be present are to be confirmed as being safe (verified) by a person (or organisation) competent in the field of explosion protection

What arrangements are in place to deal with accidents, incidents and emergencies?

You need to assess the likelihood, and scale or magnitude of the effects that may result from any foreseeable accident, incident, emergency or other event involving dangerous substances present and put in place emergency arrangements to mitigate the effects of such a situation and eventually bring back the situation to normal.

Note:

An accident, incident or emergency is any unplanned event which has the potential to cause harm and which may require the evacuation, escape or rescue of one or more people.

5.12 What warning (including visual and audible alarms) and communication systems are in place?

Considerations:

- Review existing system
- Install a more effective system
- Consider, visual or audible warnings to warn people before explosive conditions are reached

5.13 What escape facilities are in place?

Considerations:

- Additional routes & exits
- Additional escape routes

- Protected routes
- Compensating features

5.14 What are the emergency procedures to be followed in the event of an emergency?

Considerations:

- Review it in light of your findings
- Look at remedial actions and rescue operations
- Competent persons nominated to implement procedures

5.15 What are your procedures should a fire develop involving a dangerous substance?

Considerations:

- Mitigate the effects of the fire
- Restore the situation to normal
- Inform those relevant persons who may be affected
- Only let those persons who are essential for the carrying out of repairs and other necessary work are permitted in the affected area and provide appropriate PPE and protective clothing and any necessary specialised safety equipment and plant, until the situation is restored to normal.

5.16 What equipment and clothing is available for essential personnel dealing with the incident?

Considerations:

- What Personal Protective Equipment [PPE] is available

5.17 When and where are practice drills carried out?

Considerations:

- Who is responsible for organising these drills?
- How often are they conducted?
- Who do they involve? – employees, emergency services

5.18 What information and training on emergency procedures is available to employees?

Considerations:

- What information, instruction and training is available
- Need to include:
  - names of the substances in use and risks they present
  - access to any relevant safety data sheet

- details of legislation that applies to the hazardous properties of those substances
- the significant findings of the risk assessment
- details of relevant work hazards
- hazard identification arrangements
- specific hazards likely to arise at the time of an accident, incident or emergency

Note:
Information, instruction and training need only be provided to non-employees where it is required to ensure their safety.

5.19 How are emergency services informed and provided with information on emergency procedures?

Considerations:

- Contact and liaise with emergency services to see what their requirements are
- Make the plans available to emergency services to enable them to prepare their own response procedures and precautionary measures
- Consider displaying the plan at the premises

N.B. Significant Findings.

Once you have completed this section, you will need to record any of the significant hazards and the 'Control Measures' provided to reduce the risk. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk/kybib

Luminous Discharge Tubes

Under the FSO you will be responsible for ensuring that luminous discharge tubes are fitted with a cut off switch.

It only applies to apparatus consisting of luminous tube signs designed to work at a voltage normally exceeding the prescribed voltage of:

- 1000 volts AC or 1500 volts DC if measured between any two conductors; or
- 600 volts AC or 900 volts DC if measured between a conductor and earth or where a transformer is provided to raise the voltage for it to operate.

6.1 What standard is your firefighter switch installed to?

- Exterior installation - outside building near to tube
- Interior installation - main entrance or agreed position with fire authority
- Switch not more than 2.7m from ground
- Each switch clearly marked
- Switch red - notice 130mm x 100mm marked 'FIREFIGHTERS SWITCH'
- ON/OFF of switch clearly marked
- Switch provided with a guard to prevent it inadvertently switching to the ON position

6.2 What is your procedure for informing the fire authority about the installation of firefighter switches for luminous tubes?

Considerations:

- Notice sent to fire authority:
  - 42 days for new installation
  - 21 days after order comes into force for existing

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk

Firefighter Protection

Under the FSO you will be responsible for ensuring the safety of firefighters in the event of a fire that the premises and any facilities, equipment and devices for the use or protection of firefighters are available and in good working order.

7.1 What does the premises have available for the use of or protection of firefighters including any facilities, equipment and devices?

Considerations:

You will need to check if any of the following are installed:

- Fire lifts
- Access for fire engines
- Access roads
- Firefighting shafts
- Smoke-control systems
- Dry or wet rising mains
- Fire-fighting inlets and outlets i.e. foam
- Hydrants
- Information and communication arrangements including information to brief the Fire and Rescue Service when they arrive
- Firefighters' switches

7.2 What are your procedures to maintain the premises and these facilities, equipment and devices in an efficient state, working order and good repair?

Considerations:

Ensure:

- All equipment is tested regularly in accordance with installers and manufacturers recommendations
- Records are kept of these results
- Access to premises - not obstructed and available at all times
- Dry or wet rising mains / firefighting inlets and outlets – secure and tested on regular basis
- Hydrants – kept unobstructed and tested regularly
- Information and communication arrangements – working and compactable with fire and rescue services equipment
- Information to brief the Fire and Rescue Service when they arrive – checked to ensure it is up to date

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk

Spread of Fire

Under the FSO you will be responsible for looking at how you can reduce the risk from fire and its spread.

8.1 What are measures are in place to reduce the risk of fire on the premises and the risk of the spread of fire on the premises?

Considerations:

- Use compartment walls / ceilings - fire resistance to reduce size of rooms
- Unoccupied areas - install detection
- Understand behaviour of fire
- Contents of rooms - reduce fuel sources / ignition sources
- Automatic detection - to give early warning in case of fire
- Good housekeeping
- Segregation of risks
- Suppression systems i.e. sprinklers, water and gas
- Reduce sources of oxygen
- Avoid use of displays in corridors / foyers or minimise
- Installation of smoke control systems
- Arson policy

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk

Firefighting and Fire Detection

9.1 What firefighting equipment do you have in place and is it sufficient and located correctly?

In deciding if there are sufficient firefighting appliances in the work place, you need to assess what the minimum provision should be, then decide if this is sufficient considering the style and layout of your workplace, the fire hazards present, your company fire policy on staff actions, and the level of training the staff have received.

Firefighting equipment should be located in conspicuous positions on escape routes, preferably near exit doors. You may also need to site some firefighting equipment near to specific fire hazards. However, if this is done, ensure that staff can still gain access to the firefighting equipment, even if the hazard is on fire.

You should also consider using fire points, where various types of fire equipment are sited together.

Considerations:

- Provide suitable additional firefighting equipment including specialist equipment for specialist hazards
- Make visible
- Provide additional signage

9.2 What measures do you have in place to ensure sufficient staff are trained in use of firefighting equipment?

Any staff that may need to use firefighting equipment should be trained in its use and operation. You need to look at your Fire Policy.

Considerations:

- Review existing training
- Implement training programme if one is not available
- Review Fire Policy

9.3 What are the measures you have in place for giving warning, including the use of automatic fire detection systems?

It is vital that a fire can be detected quickly and a warning given, so that every one can escape safely. In areas of the workplace that are occupied by staff, the fire is often 'spotted' by a member of staff by sight, smell, or sound.

In unoccupied areas or areas where people may be asleep or unaware of the outbreak of fire, you may need to consider an automatic means of giving warning in case of fire, such as smoke or heat detection.

Considerations:

- Review existing system
- Install a more effective fire alarm system and/or detection system

9.4 What signage do you have in place for the fire/detection system?

If the fire detection equipment is not obviously visible, then its location should be indicated by a sign, and where necessary a directional arrow. Any sign should incorporate a pictogram in line with the Health & Safety (Safety Signs and Signals) Regulations 1996.

Considerations:

- Improve the signage

9.5 What measures are in place to ensure your employees are trained on how to operate the fire alarm / detection system and what action they should take upon hearing it?

It is vitally important that all members of staff are familiar with how to operate the alarm system and also how to react on hearing the alarm. To this end, regular training for all members of staff must be completed and recorded. Arrangements must also be put in place so any visitors to the premises are aware of what to do on hearing the alarm.

Considerations:

- Review training
- Train staff
- Provide clear instructions

9.6 What measures are in place to ensure the fire routine notices are clearly displayed throughout the workplace and that the wording is correct and in line with policy?

Fire action notices should be positioned in prominent places around the work place. The locations should be visible and positioned such that staff will read them. It should reflect your company policy as to what you want people to do in the event of a fire. The notice should be worded as to the actions of any one who may read it.

For example, if your Fire Action Notice contains the words 'Attack the fire if safe to do so', we would recommend that you need to train everyone, as you are inviting them all to 'have a go.' If you don't want this to happen, rewrite your Fire Action Notice.

When re-writing action plan notices, remember that they should now comply with the Health and Safety (Safety Signs & Signals) Regulations 1996, which means that word only signs are illegal and all safety signs must contain a pictogram. Action plan notices should be colour coded in red/white and blue.

- **RED** - Prohibition - **Do not**.... e.g. do not use lifts.
- **BLUE** - Mandatory - **You must**.... e.g. operate nearest fire alarm call point.
- **WHITE** - Background or letter colour.

Considerations:

- Formulate notice, circulate and distribute

9.7 What is your Emergency Plan?

You need to look critically at what you want all staff, plus yourself, to do in the event of a fire, and then ensure that everyone is given sufficient information, instruction, training and supervision to enable them to carry out those tasks. If this is done properly, you should find that you would have a tiered structure for training with differing training needs for different levels of staff/staff roles. For example, your fire marshals will need a higher level of training than a member of staff who does not have any specific duties in relation to fire. Remember to keep a record of the training given.

Considerations:

- Implement one that covers your fire warning arrangements, means of escape, firefighting equipment, provision of information to emergency services

Note:

You will need to record the fire protection measures provided to show how you have complied with the requirements, where necessary, to provide the means for fighting fire and fire detection.

- Are there engineered solutions in place, which have been designed to compensate for changes or unusual circumstances?
- Do they still work?
- Have they been compromised by additional changes since they were installed?

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk

Emergency Routes and Exits

The size of the building and the nature of its occupants will dictate the time taken to evacuate a building. In all cases, the time needed to escape to a place of safety must be less than the length of time it would take from a fire starting and the means of escape being unsafe to use.

- Have any structural alterations been made to the premises since they were built or last inspected by the Fire Service?
- Do the alterations affect fire resistance of the structure?
- Have any alterations been made to the layout within the premises?
- Do they affect the means of escape or evacuation times?

10.1 What measures are in place to ensure that everyone can safely escape from the premises?

As a general rule, the premises should be provided with more than one means of escape to allow people to turn their backs on the fire and walk away.
In circumstances where there is a single means of escape, exits routes and stairways should be provided with fire resisting walls and doors to contain the fire and allow people to exit safely.

The width of a corridor will be determined by the width of the doors in it or at it's end. This width will be determined by the number of people that may have to use it. For a single door the ballpark figure is generally about 1 metre wide, although wheelchair users will need a width of 1.2 metres.

The exit routes, including the corridors, stairways and exit doors, need to be wide enough to allow the maximum number of people who may need to use those routes, to do so safely and quickly.

Ideally, all doors should open in the direction of escape so that people are not slowed down by having to stop and open the door towards them. However, this is not always practical or necessary. As a general rule, the door should always open in the direction of escape in the following circumstances: -

- The door will be used by more than 50 people.
- The door is at or near to the foot of a stairway.
- Staff are escaping from a 'high fire risk' area.
- The door is in a building which is used for public assembly, e.g. place of public entertainment.

Staff should be able to open doors quickly and easily without the use of a key, and they should not have to undo more than one security device. If the doors are required to be secured, the use of push bars, push pad opening devices are

recommended, especially if public are present. All staff need to be trained how to operate any security device, and operating signs may be needed. When making this part of the assessment, look critically at any electronic locking system and ensure that it de-energises and opens on actuation of the fire alarm. Also look carefully at the use of mechanical number locks within the workplace. It should be obvious that you would not want to be confronted by a numerical locking system, and have to remember the number to have to escape from fire.

To do its job, a fire resisting door needs to be undamaged and fully shut. Therefore, the majority of fire resisting doors are fitted with a self-closing device and are labelled 'Fire Door Keep Shut'. Ensure that the self-closing device does its job properly, i.e. when the door is fully open, it does not stick on the floor or carpet, and that when it shuts, the closer shuts the door fully and overrides the latching mechanism of the door. Due to their location, some doors become a nuisance to staff, so they tend to get wedged open. This practice is dangerous and should not be endorsed. Fire doors can, however, be held open by an approved automatic door release mechanism.

Considerations:

Ensure:

- Existing exit routes and exits are available and not obstructed
- Doors open in the direction of travel
- All emergency routes and exits lead to a place of safety
- That sliding or revolving doors are not being used specifically as emergency exits
- All door fastenings on exit routes and final exits are easily openable
- All fire resisting doors that require self closing mechanisms have been fitted and work

Provide:

- Additional routes and exits
- Training for safe evacuation
- Additional escape routes
- Protected routes
- Compensating features e.g. smoke detection engineered solution

and:

- Improve fire alarm/detection system
- Fit self-closing doors

10.2 What measures are in place to ensure that all the exit routes and exits are signed?

Other than the normal way in and out of a building, all exit routes and exit doors should normally be signed. It may even be necessary to sign the normal route in/out, e.g. staff enter via different routes, or the building is used by the public or people who are unfamiliar with the exit routes. All signs should be sited properly so that they can be seen, are large enough to be read, and should contain a pictogram.

It would benefit to get a good sign manufacturers catalogue, as this will show you what is available, and also give you sizes required dependant upon the viewing distance.

Considerations:

- Install sufficient signs to enable occupants to find their way out

10.3 What measures are in place to ensure that all exit routes are illuminated?

It is of little value providing escape routes if people cannot see to use them. You need to investigate to ascertain if a fire caused the normal lighting system to fail that people would still be able to see adequately to use the escape routes. You need to check the escape routes with the lights off.

- Will there be sufficient borrowed light from other sources, e.g. streetlights or unaffected lighting systems?
- If lighting levels are not sufficient, then you may need to consider some form of emergency escape lighting. When making this assessment, you must also consider the hours of work and time of day.

If you decide to install some form of emergency escape lighting, it should operate on a failure of the normal local lighting system within the workplace.

Emergency escape lighting may need to illuminate:-

- Escape routes clearly along their entire length and out of final exit doors.
- Fire alarm call points and firefighting equipment.
- Specific manufacturing processes may need illuminating to enable them to be closed down safely.

The basic options for escape lighting are:-

- Traditional ceiling/wall mounted lighting units.
- Low level floor mounted lighting strips/units.
- Torches – these may be an option in small premises or on rare occasions.

Emergency escape lighting is a technical subject and advice should be sought from a competent person.

Considerations:

- Install emergency lighting
- Improve existing emergency lighting

10.4 What measures are in place to ensure that all staff have been trained in evacuation procedures?

All staff should be trained in what to do in the event of fire. As a result of your fire risk assessment, and your company's Health & Safety Policy, you should compile an emergency plan covering what to do in the event of a fire, and how to control the fire safety measures you have highlighted are necessary and have implemented in your workplace. One aspect of these measures will be to train staff in the evacuation of the workplace, and in any task that they need to under take to ensure safety in the event of a fire.

Considerations:

- Instigate training programme
- Produce instructions
- Fire drill practice

Note:

You will need to record the fire protection measures provided to show how you have complied with the requirements, where necessary, to provide emergency routes and exits.

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk

Maintenance and Testing

11.1 What are your maintenance, service and testing policies for fire-resisting doors and exit doors?

Physically check that all doors open easily and that the door furniture, e.g. panic bolt, has not been damaged so that it would be difficult to operate the door. Take extra care to check doors that are infrequently used, the door may swell up or jam in some other way, and prevent people escaping when needed.

Check that the self-closing device pulls the door shut from the fully open position to fully shut, and that it overrides the latching system so that the door fits securely in the rebate, and is not part open, as smoke would then bypass the door. Ensure that any automatic 'hold open' devices that are fitted to fire doors release on actuation of the fire alarm system, and that they have not caused the door to warp to such a degree that excessive gaps are created between the door and door frame.

Considerations:

- Correct any deficiencies and implement maintenance programme
- Ensure all self closing devices and hold open devices work

11.2 What are your maintenance, service and testing policies for your emergency lighting?

Ensure that lighting units' lenses are clean and in good condition. Test the lighting monthly, six-monthly, annually and three yearly. The majority of tests are electrical tests, so you may need to employ a specialist company to undertake this. Your fire protection company may undertake this style of testing, and should be able to instruct you on how to carry out the monthly test yourself if that is possible.

Considerations:

- Correct any deficiencies and implement maintenance programme

11.3 What are your maintenance, service and testing policies for your firefighting equipment?

If you have any firefighting equipment, then it should be maintained in line with the manufacturer's/installation engineer's recommendations.

Considerations:

- Correct any deficiencies and implement maintenance programme

11.4 What is your maintenance, servicing and testing policy for your fire alarm/ detection system?

The fire alarm system should be tested weekly and thereafter at annual (and sometimes quarterly) time periods. You need to check with your supplier or fire alarm company to ensure compliance with the standard that the alarm is installed to.

If automatic fire detection e.g. heat/smoke detectors, are installed, ensure that they have also been tested, and should therefore do their task. Seek advice from your supplier or fire alarm company.

Considerations:

- Correct any deficiencies and implement maintenance programme

11.5 What are your maintenance, service and testing policies for your sprinklers and other fixed firefighting equipment?

Where automatic sprinklers or any other fixed firefighting systems have been installed, they should be tested in accordance with the manufacturer's / installer's instructions and serviced by a competent person on a regular basis.

Considerations:

- Correct any deficiencies and implement maintenance programme

Note:

You will need to record how you have complied with the provision for maintenance and testing of the fire protection measures.

N.B. Compliance.

Once you have completed this section, you will need to record the measures taken to ensure compliance with the legislation in the Maintenance and Testing/ Compliance Check forms. Use either the forms provided, or download the interactive version from www.wmarsontaskforce.gov.uk