

## **Fire Risk Assessment – Guidance Notes.**

It is the legal responsibility of an event organiser to ensure that a fire risk assessment has been carried out for the event site and the activities taking place. The assessment must be carried out by a 'competent' person, but this could well be the event organiser themselves.

Fire Risk Assessment aims to Identify fire hazards, remove or reduce the risk of harm resulting from the fire hazards to a reasonable level and ensure reasonable precautions are in place to keep people safe if a fire does start. In order to do this the assessor can use a five step process. A similar process may be used for general risk assessments.

- Identify fire hazards
- Identify people at risk
- Evaluate the level of risk
- Record significant findings
- Review, and keep record of findings up to date

### **Identifying fire hazards**

Fire hazards fall into three categories:

#### **1 – Potential sources of ignition**

- Naked flames: smoker's materials, matches, pilot lights, gas/oil heaters, gas welding, cookers, etc.
- Hot surfaces: heaters, engines, boilers, machinery, lighting (e.g. halogen lamps), electrical equipment, etc.
- Hot work: welding, grinding, flame cutting.
- Friction: drive belts, worn bearings, etc.
- Sparks: static electricity, metal impact, grinding, electrical contacts/switches,
- Arson, i.e. deliberate ignition.

#### **2 – Potential sources of fuel**

Anything that burns is a potential fuel, examples include:

- Solids: textiles, wood, paper, card, plastics, rubber, PU foam, furniture, fixtures/fittings, packaging, waste materials, etc.
- Liquids: solvents (petrol, white spirit, methylated spirits, paraffin, thinners, etc), paints, varnish, adhesives, etc.
- Gases: LPG, acetylene.

#### **3 – Potential sources of Oxygen**

- Oxygen present in the air in the surrounding space.
- Oxygen found in chemical form (oxidising agents)
- Gas in cylinders or piped systems.

If all three of these categories are present and in close proximity to each other, then the fire risk could increase as a result.

## **Identifying people at risk**

- People who work close to or with fire hazards
- People who work alone, or in isolated areas
- Children or parents with babies
- Elderly people
- Disabled people
- People in enclosed environments
- People in crowded environments

If there is a fire, the greatest danger is the spread of the fire, heat and smoke through the premises.

If this happens, the main risk to people is from the smoke and products of combustion, which can very quickly incapacitate those escaping.

If a premises, venue or environment does not have adequate means of escape or if a fire can grow to an appreciable size before it is noticed, then people may become trapped or overcome by heat and smoke before they can evacuate.

In identifying the potential fire hazards and the people at risk the following conditions need to be evaluated.

- The likely speed of growth and spread of any fire, and associated heat and smoke as some fuels burn much faster and produce more toxic products than others do
- The numbers of persons in the area including employees, contractors, visitors, members of the public.
- Arrangements for giving warning to people if a fire occurs. Will any outbreak be conspicuous or will some form of fire detection and alarm system be required.
- Means of escape (can they make their way out quickly, easily and safely?).

## Evaluating the risks

Once the hazards and the persons at risk have been identified, effects of any particular hazards can be assessed, taking into account any existing control measures that are already in place.

Once this has been done, decisions can be made if any further control measures are needed in order to reduce the risk to an acceptable level.

Further control measures may:

- Act to reduce the possibility of ignition.
- Minimise the potential fuel load.
- Assist persons to escape from the effects of a fire, should it occur.

Different control measures can be applied to reduce the risk to an acceptable level. For example, if the risk is the possibility of a fast growing fire, potential control measures will include a combination of the following:

- Removing or reducing possible ignition sources.
- Moving the hazard to an area that affects the minimum of persons.
- Providing additional exits/protected routes to speed the escape of the occupants.
- Provide a fire detection or coded alarm evacuation message to warn persons of the fire in its early stages.
- Provide coded messaging, training and instigate through radio system.
- Training the staff to reduce the possibility of a fire occurring, e.g. housekeeping/safe working practices.
- Continuous monitoring and evaluating of potential hazards.
- Providing appropriate fire fighting equipment or fixed installations..