SOUTHERN FEDERATION
of
MODEL ENGINEERING SOCIETIES

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Information Sheet No. 22

Date: October 2015
Subject: Fire Safety

1. Preamble.

This Information Sheet is intended as a guide to member Society management committees. It represents solely the Southern Federation's interpretation of the requirements.

This Information Sheet has been prepared at the request of people requiring a basic guide to managing fire safety in their Society's premises. Many other sources of information are available, most notably on the government and Health and Safety Executive web sites.

2. Fire safety risk assessment.

Under the Regulatory Reform (Fire Safety) Order 2005 (in England and Wales) and under Part 3 of the Fire (Scotland) Act, a Fire Safety Risk Assessment is required for all workplaces and/or where members of the public are present.

The risk assessment should identify what could cause a fire to start, substances that could burn and the people who may be at risk.

Based on the findings of the assessment, Societies need to ensure that adequate and appropriate fire safety measures are in place to minimise the risk of injury or loss of life in the event of a fire.

Once the risks have been identified, appropriate action can be taken to manage them. Consider whether they can be avoided altogether or, if this is not possible, how the risks can be reduced and managed. Also consider how people can be protected if there is a fire.

It is important to be aware of the risks and to control or eliminate them to prevent accidents.

Many templates are available from the Internet for Fire Risk Assessments. The appendix includes an example for a small vehicle repair workshop.

It is recommended that member Societies make the Fire Risk Assessment available to their members by notice board or web site so that the membership can see for themselves the risks and

intended means for their control.

3. General fire safety hazards

Most fires are preventable. Those responsible for premises can avoid them by taking responsibility for and adopting appropriate behaviours and procedures.

Ordinary fires need three things to start and sustain – a means of ignition (heat), a fuel (something that burns) and oxygen.

- Means of ignition include heaters, lighting, naked flames, electrical equipment, smokers' materials (cigarettes, matches, etc) and anything else that can get very hot or cause sparks.
- Sources of fuel include wood, paper, plastic, rubber or foam, loose packaging materials, waste rubbish and furniture.
- Sources of oxygen include the air around us.

Work that involves the storage, use or creation of chemicals, vapours, dusts, etc that can readily burn or explode is hazardous. Each year people are injured by flammable substances accidentally catching fire or exploding.

Many common substances can cause fires or explosions. These range from the obvious, e.g. flammable chemicals, petrol, cellulose paint thinners and welding gases, to the less obvious – engine oil, grease, packaging materials, dusts from wood or other organic materials.

4. What do I have to do?

Building owners or occupiers must carry out a fire safety risk assessment and keep it up to date. For the purposes of this Information Sheet this will usually be the management committee of the member Society or a competent person delegated by them. Actions required can be any or all of the following …

- Carry out a fire safety risk assessment.
- Keep sources of ignition and flammable substances apart.
- Avoid accidental fires, e.g. make sure heaters cannot be knocked over.
- Gas torches, for welding or soldering, are significant sources of fires. They should be handled at all times with due consideration of their risk.
- Ensure good housekeeping at all times, e.g. avoid build-ups of rubbish or materials that could burn.
- Consider how to detect fires and how to warn people quickly if they start, e.g. by installing smoke alarms and fire alarms or bells.
- Have the correct fire-fighting equipment for putting a fire out quickly.
- Keep fire exits and escape routes clearly marked and unobstructed at all times.
- Ensure members and visitors receive appropriate training on procedures they need to follow, including fire drills.
- Review and update your risk assessment regularly.

To help prevent accidental fires or explosions, you first need to identify …

- what substances, materials, processes, etc. have the potential to cause such an event, i.e. substances that burn or can explode
- what might set them alight
- the people who may be at risk/harmed

Once the risks have been identified, you should consider what measures are needed to reduce or remove the risk of people being harmed. This will include measures to prevent these incidents happening in the first place as well as precautions that will protect people from harm if there is a fire or explosion.

5. Find out more.

- The Department for Communities and Local Government (DCLG) website http://www.communities.gov.uk/firesafety has advice on the legislation, including premises-specific guidance documents designed to help you meet your responsibilities under the Regulatory Reform (Fire Safety) Order 2005.

- The Welsh Government website http://wales.gov.uk/topics/housingandcommunity/safety/fire/safety/fslaw also provides information.

- The Scottish Government website http://www.scotland.gov.uk/Topics/Justice/policies/police-fire-rescue/fire/FireLaw provides similar information to help you meet your responsibilities under the Fire (Scotland) Act 2005.

- The HSE website http://www.hse.gov.uk/construction/safetytopics/fire.htm has guidance on fire safety in the construction industry.

6. The law.

The Regulatory Reform (Fire Safety) Order 2005 covers general fire safety in England and Wales. In Scotland, requirements on general fire safety are covered in Part 3 of the Fire (Scotland) Act 2005, supported by the Fire Safety (Scotland) Regulations 2006.

In the majority of premises, local Fire and Rescue authorities are responsible for enforcing this fire safety legislation. HSE has enforcement responsibility on construction sites, for nuclear premises, and on ships under construction or undergoing repair. Enforcement responsibility for fire safety where dangerous substances are kept and used generally lies with HSE (or local authorities if they inspect the premises).

7. Key points to remember.

- Think about the risks of fire and explosions from the substances you use or create in your activities and consider how you might remove or reduce the risks
- Use supplier safety data sheets as a source of information about which substances might be flammable
- Consider reducing the amount of flammable/explosive substances you store on site
- Keep sources of ignition (eg naked flames, sparks) and substances that burn (eg vapour, dusts) apart
- Get rid of flammable/explosive substances safely
- Review your risk assessment regularly
- Maintain good housekeeping, eg avoid build-up of rubbish, dust or grease that could start a fire or make one worse

R. Walker
21st October, 2015

Safety Officer, Southern Federation of Model Engineering Societies.

Changes Record.

Record of changes since the drafting meeting on xxx.. These notes are not part of the document and are included only as reference to changes made during or after the meeting in an effort to clarify some parts that still appeared to be unclear.

Section / paragraph (new draft)	Old text	New text	Reason
2	Sentence added at end about making assessment available to club members	It is recommended that member Societies make the Fire Risk Assessment available to their members by notice board or web site so that the membership can see for themselves the risks and intended means for their control.	Suggested by Peter S. by email.
NA	All new text		
NA	All new text		
NA	All new text		

Appendix - Example Fire Risk Assessment for a small vehicle repair company.

Address	Bearing Up Vehicle Repairs Unit 4 Old Mill Industrial Estate Upper Downhill Somerset
Telephone number:	01234 567890
Used As:	Vehicle repair and MOT testing station
Guidance Used:	Factories Guide
Date of assessment:	28 October 2006
Name of assessor:	Mick Cannock
Details of assessor:	Proprietor
Review Frequency:	Yearly

Statement of Policy

The management of Bearing Up recognises and accepts ultimate responsibility for the safety of employees and customers. It is our aim to ensure that we will, so far as is reasonably practicable, comply with the requirements of the Regulatory Reform (Fire Safety) Order 2005. We will make provision for the effective planning, organisation, control, monitoring and review of the preventive and protective measures in relation to fire safety.

Signed:

Mick Cannock 28 October 2006

Management Systems

Bearing Up is owned and managed by Mick Cannock. The assistant manager is Sam Panner. One of them is on duty at all times except for holiday periods and sickness when the senior mechanic will be in charge. Day to day responsibility for fire safety and staff training rests with Mick Cannock.

The Unit is rented from Holding Properties Ltd. Under the terms of the lease the tenants are responsible for employing staff, day to day upkeep and maintenance but need permission to make structural alterations. Grounds maintenance is included in the service charge

Property Description
The industrial unit is purpose built, single storey 12m wide by 25 m long and is in the middle of a row of similar units. The walls are masonry with a steel roof. There is a large roller shutter for vehicle access; access to reception is via a uPVC front door. The fire exit at the rear leads to a gravel path around the whole building. There are some stairs leading to parts storage area over the office/reception.

Occupancy	**Size:**
Times premises in use: 08:00 to 17:30 Max number at work at any time: 7 Max number of people: 15 (employees and others)	Building Footprint: (metres) 12 X 25 Number of floors: 1 Number of stairs: 1 (to storage over offices)

Fire Safety Systems
Fire Warning System: There are break glass call points at each exit door (total 3), bells are audible throughout the building. The alarm is tested weekly and receives annual maintenance.
Escape Lighting: During the winter it gets dark several hours before closing time. The unit is fitted with escape lights in the work area, corridor and reception.
Other Fire Safety Systems (e.g. sprinklers) None

How a Fire Could Start

We repair damaged vehicles so the likelihood of fire starting is higher than for a car showroom. Repairs include welding; this is only done in a defined area at the rear near the exit; no welding is done after 4 pm and a check is made before closing at 17:30.

Other possible causes include electrical faults, and smoking. Electrical equipment (e.g. computers) is tested. Smoking is only permitted in the staff rest room.

Update August 2007: new law means smoking is not permitted in workplaces. Staff smoke outside.

People Affected by Fire

Employees and customers.

Most customers stay in reception; if they visit the repair shop they are accompanied by a member of staff.

Staff Training

Employees are fully trained mechanics so are aware of vehicle fire hazards. New starters are required to read this risk assessment and are shown location of exits and fire extinguishers. Use of extinguishers is explained on their first day. They sign a form confirming their understanding. The form is kept on their personnel file.

Escape Routes

The unit is 25 m from front to back. The roller shutter is kept fully open at all times. In exceptionally cold weather the shutter is closed but staff can still escape through reception or rear fire exit.

The rear fire exit has been fitted with a lockable steel bar security door following a break in at a neighbouring unit. The barred door is unlocked and held in the open position at the start of the day and locked as part of the end of day checks.

Sometimes the rear path gets overgrown; monitor and inform management company: grounds maintenance is included in service charge

Fire Extinguishers
There are extinguishers by the front and rear exits. Dry powder and water extinguishers are provided at each point There is a water extinguisher in reception. All extinguishers are tested annually
Fire Action
Raise alarm by shouting and breaking alarm call point. Receptionist will call fire service. All assemble outside roller shutter until fire service arrives.
Fire Information
Notices in staff room and at call points
Sketch plan of Premises.

Summary of Significant Findings
Fire is most likely to start in workshop. There are exits at front and back. Monitor condition of rear escape path. Management company should keep clear as part of grounds maintenance contract and service charge
Action Plan
Review assessment annually

Review Date	Comments
20 August 2007	The smoking ban came into force from 1 July 2007. Staff must smoke outside
September 2009	No changes
November 2010	No problems with rear path becoming overgrown for last 3 years, continue to monitor